

CALL NO. 100

CONTRACT ID. 161270

ROCKCASTLE COUNTY

FED/STATE PROJECT NUMBER NHPP IM 0753 (092)

DESCRIPTION 1-75 (ROCKCASTLE COUNTY)

WORK TYPE GRADE, DRAIN & SURFACE WITH BRIDGE

PRIMARY COMPLETION DATE 10/31/2018

LETTING DATE: December 21,2016

Sealed Bids will be received electronically through the Bid Express bidding service until 10:00 AM EASTERN STANDARD TIME December 21,2016. Bids will be publicly announced at 10:00 AM EASTERN STANDARD TIME.

PLANS AVAILABLE FOR THIS PROJECT.

DBE CERTIFICATION REQUIRED - 7%

REQUIRED BID PROPOSAL GUARANTY: Not less than 5% of the total bid.

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ADMINISTRATIVE DISTRICT - 08

CONTRACT ID - 161270 NHPP IM 0753 (092) COUNTY - ROCKCASTLE

PCN - DE10200751670 NHPP IM 0753 (092)

I-75 (ROCKCASTLE COUNTY) (MP 64.500) TENN STATE LINE TO LEXINGTON: WIDEN I-75 TO 6 LANES FROM 1.85 MILES N GREEN HILL ROAD OVERPASS N TO CLAY LICK BRANCH AT CONWAY (MP 69.000), A DISTANCE OF 04.50 MILES.GRADE, DRAIN & SURFACE WITH BRIDGE SYP NO. 08-00006.30.

GEOGRAPHIC COORDINATES LATITUDE 37:26:39.00 LONGITUDE 84:20:18.00

COMPLETION DATE(S):

COMPLETED BY 10/31/2018

APPLIES TO ENTIRE CONTRACT

CONTRACT NOTES

PROPOSAL ADDENDA

All addenda to this proposal must be applied when calculating bid and certified in the bid packet submitted to the Kentucky Department of Highways. Failure to use the correct and most recent addenda may result in the bid being rejected.

BID SUBMITTAL

Bidder must use the Department's Expedite Bidding Program available on the Internet web site of the Department of Highways, Division of Construction Procurement. (www.transportation.ky.gov/construction-procurement)

The Bidder must download the bid file located on the Bid Express website (www.bidx.com) to prepare a bid packet for submission to the Department. The bidder must submit electronically using Bid Express.

JOINT VENTURE BIDDING

Joint venture bidding is permissible. All companies in the joint venture must be prequalified in one of the work types in the Qualifications for Bidders for the project. The bidders must get a vendor ID for the joint venture from the Division of Construction Procurement and register the joint venture as a bidder on the project. Also, the joint venture must obtain a digital ID from Bid Express to submit a bid. A joint bid bond of 5% may be submitted for both companies or each company may submit a separate bond of 5%.

UNDERGROUND FACILITY DAMAGE PROTECTION

The contractor shall make every effort to protect underground facilities from damage as prescribed in the Underground Facility Damage Protection Act of 1994, Kentucky Revised Statute KRS 367.4901 to 367.4917. It is the contractor's responsibility to determine and take steps necessary to be in compliance with federal and state damage prevention directives. When prescribed in said directives, the contractor shall submit Excavation Locate Requests to the Kentucky Contact Center (KY811) via web ticket entry. The submission of this request does not relieve the contractor from the responsibility of contacting non-member facility owners, whom shall be contacted through their individual Protection Notification Center. Non-compliance with these directives can result in the enforcement of penalties.

SPECIAL NOTE FOR COMPOSITE OFFSET BLOCKS

Contrary to the Standard Drawings (2016 edition) the Cabinet will allow 6" composite offset blocks in lieu of wooden offset blocks, except as specified on proprietary end treatments and crash cushions. The composite blocks shall be selected from the Cabinet's List of Approved Materials.

REGISTRATION WITH THE SECRETARY OF STATE BY A FOREIGN ENTITY

Pursuant to KRS 176.085(1)(b), an agency, department, office, or political subdivision of the Commonwealth of Kentucky shall not award a state contract to a person that is a foreign entity required by KRS 14A.9-010 to obtain a certificate of authority to transact business in the Commonwealth ("certificate") from the Secretary of State under KRS 14A.9-030 unless the person produces the certificate within fourteen (14) days of the bid or proposal opening. If the foreign entity is not required to obtain a certificate as provided in KRS 14A.9-010, the foreign entity should identify the applicable exception. Foreign entity is defined within KRS 14A.1-070.

For all foreign entities required to obtain a certificate of authority to transact business in the Commonwealth, if a copy of the certificate is not received by the contracting agency within the time frame identified above, the foreign entity's solicitation response shall be deemed non-responsive or the awarded contract shall be cancelled.

Businesses can register with the Secretary of State at https://secure.kentucky.gov/sos/ftbr/welcome.aspx .

SPECIAL NOTE FOR PROJECT QUESTIONS DURING ADVERTISEMENT

Questions about projects during the advertisement should be submitted in writing to the Division of Construction Procurement. This may be done by fax (502) 564-7299 or email to kytc.projectquestions@ky.gov. The Department will attempt to answer all submitted questions. The Department reserves the right not to answer if the question is not pertinent or does not aid in clarifying the project intent.

The deadline for posting answers will be 3:00 pm Eastern Daylight Time, the day preceding the Letting. Questions may be submitted until this deadline with the understanding that the later a question is submitted, the less likely an answer will be able to be provided.

The questions and answers will be posted for each Letting under the heading "Questions & Answers" on the Construction Procurement website (www.transportation.ky.gov/contract). The answers provided shall be considered part of this Special Note and, in case of a discrepancy, will govern over all other bidding documents.

HARDWOOD REMOVAL RESTRICTIONS

The US Department of Agriculture has imposed a quarantine in Kentucky and several surrounding states, to prevent the spread of an invasive insect, the emerald ash borer. Hardwood cut in conjunction with the project may not be removed from the state. Chipping or burning on site is the preferred method of disposal.

INSTRUCTIONS FOR EXCESS MATERIAL SITES AND BORROW SITES

Identification of excess material sites and borrow sites shall be the responsibility of the Contractor. The Contractor shall be responsible for compliance with all applicable state and federal laws and may wish to consult with the US Fish and Wildlife Service to seek protection under Section 10 of the Endangered Species Act for these activities.

ACCESS TO RECORDS

The contractor, as defined in KRS 45A.030 (9) agrees that the contracting agency, the Finance and Administration Cabinet, the Auditor of Public Accounts, and the Legislative Research Commission, or their duly authorized representatives, shall have access to any books, documents, papers, records, or other evidence, which are directly pertinent to this contract for the purpose of financial audit or program review. Records and other prequalification information confidentially disclosed as part of the bid process shall not be deemed as directly pertinent to the contract and shall be exempt from disclosure as provided in KRS 61.878(1)(c). The contractor also recognizes that any books, documents, papers, records, or other evidence, received during a financial audit or program review shall be subject to the Kentucky Open Records Act, KRS 61.870 to 61.884.

In the event of a dispute between the contractor and the contracting agency, Attorney General, or the Auditor of Public Accounts over documents that are eligible for production and review, the Finance and Administration Cabinet shall review the dispute and issue a determination, in accordance with Secretary's Order 11-004.

06/01/16

FEDERAL CONTRACT NOTES

The Kentucky Department of Highways, in accordance with the Regulations of the United States Department of Transportation 23 CFR 635.112 (h), hereby notifies all bidders that failure by a bidder to comply with all applicable sections of the current Kentucky Standard Specifications, including, but not limited to the following, may result in a bid not being considered responsive and thus not eligible to be considered for award:

102.02 Current Capacity Rating 102.10 Delivery of Proposals

102.8 Irregular Proposals 102.14 Disqualification of Bidders

102.9 Proposal Guaranty

CIVIL RIGHTS ACT OF 1964

The Kentucky Department of Highways, in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252) and the Regulations of the Federal Department of Transportation (49 C.F.R., Part 21), issued pursuant to such Act, hereby notifies all bidders that it will affirmatively insure that the contract entered into pursuant to this advertisement will be awarded to the lowest responsible bidder without discrimination on the ground of race, color, or national origin.

NOTICE TO ALL BIDDERS

To report bid rigging activities call: 1-800-424-9071.

The U.S. Department of Transportation (DOT) operates the above toll-free "hotline" Monday through Friday, 8:00 a.m. to 5:00 p.m. eastern time. Anyone with knowledge of possible bid rigging, bidder collusion, or other fraudulent activities should use the "hotline" to report such activities.

The "hotline" is part of the DOT's continuing effort to identify and investigate highway construction contract fraud and abuse and is operated under the direction of the DOT Inspector General. All information will be treated confidentially and caller anonymity will be respected.

SECOND TIER SUBCONTRACTS

Second Tier subcontracts on federally assisted projects shall be permitted. However, in the case of DBE's, second tier subcontracts will only be permitted where the other subcontractor is also a DBE. All second tier subcontracts shall have the consent of both the Contractor and the Engineer.

DISADVANTAGED BUSINESS ENTERPRISE PROGRAM

It is the policy of the Kentucky Transportation Cabinet ("the Cabinet") that Disadvantaged Business Enterprises ("DBE") shall have the opportunity to participate in the performance of highway construction projects financed in whole or in part by Federal Funds in order to create a level playing field for all businesses who wish to contract with the Cabinet. To that end, the Cabinet will comply with the regulations found in 49 CFR Part 26, and the definitions and requirements contained therein shall be adopted as if set out verbatim herein.

The Cabinet, contractors, subcontractors, and sub-recipients shall not discriminate on the basis of race, color, national origin, or sex in the performance of work performed pursuant to Cabinet contracts. The contractor shall carry out applicable requirements of 49 CFR 26 in the award and administration of federally assisted highway construction projects. The contractor will include this provision in all its subcontracts and supply agreements pertaining to contracts with the Cabinet.

Failure by the contractor to carry out these requirements is a material breach of its contract with the Cabinet, which may result in the termination of the contract or such other remedy as the Cabinet deems necessary.

DBE GOAL

The Disadvantaged Business Enterprise (DBE) goal established for this contract, as listed on the front page of the proposal, is the percentage of the total value of the contract.

The contractor shall exercise all necessary and reasonable steps to ensure that Disadvantaged Business Enterprises participate in a least the percent of the contract as set forth above as goals for this contract.

OBLIGATION OF CONTRACTORS

Each contractor prequalified to perform work on Cabinet projects shall designate and make known to the Cabinet a liaison officer who is assigned the responsibility of effectively administering and promoting an active program for utilization of DBEs.

If a formal goal has not been designated for the contract, all contractors are encouraged to consider DBEs for subcontract work as well as for the supply of material and services needed to perform this work.

Contractors are encouraged to use the services of banks owned and controlled by minorities and women.

CERTIFICATION OF CONTRACT GOAL

Contractors shall include the following certification in bids for projects for which a DBE goal has been established. BIDS SUBMITTED WHICH DO NOT INCLUDE CERTIFICATION OF DBE PARTICIPATION WILL NOT BE ACCEPTED. These bids will not be considered for award by the Cabinet and they will be returned to the bidder.

"The bidder certifies that it has secured participation by Disadvantaged Business Enterprises ("DBE") in the amount of _____ percent of the total value of this contract and that the DBE participation is in compliance with the requirements of 49 CFR 26 and the policies of the Kentucky Transportation Cabinet pertaining to the DBE Program."

The certification statement is located in the electronic bid file. All contractors must certify their DBE participation on that page. DBEs utilized in achieving the DBE goal must be certified and prequalified for the work items at the time the bid is submitted.

DBE PARTICIPATION PLAN

Lowest responsive bidders must submit the *DBE Plan/ Subcontractor Request*, form TC 14-35 DBE, within 7 days of the letting. This is necessary before the Awards Committee will review and make a recommendation. The project will not be considered for award prior to submission and approval of the apparent low bidder's DBE Plan/Subcontractor Request.

The DBE Participation Plan shall include the following:

- Name and address of DBE Subcontractor(s) and/or supplier(s) intended to be used in the proposed project;
- Description of the work each is to perform including the work item, unit, quantity, unit price and total amount of the work to be performed by the individual DBE. The Project Code Number (PCN), Category Number, and the Project Line Number can be found in the "material listing" on the Construction Procurement website under the specific letting;
- The dollar value of each proposed DBE subcontract and the percentage of total project contract value this represents. DBE participation may be counted as follows; a) If DBE suppliers and manufactures assume actual and contractual responsibility, the dollar value of materials to be furnished will be counted toward the goal as follows:
 - The entire expenditure paid to a DBE manufacturer;
 - 60 percent of expenditures to DBE suppliers that are not manufacturers provided the supplier is a regular dealer in the product involved. A regular dealer must be engaged in, as its principal business and in its own name, the sale of products to the public, maintain an inventory and own and operate distribution equipment; and
 - The amount of fees or commissions charged by the DBE firms for a bona fide service, such as professional, technical, consultant, or managerial services and assistance in the procurement of essential personnel, facilities, equipment, materials, supplies, delivery of materials and supplies or for furnishing bonds, or insurance, providing such fees or commissions are determined to be reasonable and customary.

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- b) The dollar value of services provided by DBEs such as quality control testing, equipment repair and maintenance, engineering, staking, etc.;
- c) The dollar value of joint ventures. DBE credit for joint ventures will be limited to the dollar amount of the work actually performed by the DBE in the joint venture;
- Written and signed documentation of the bidder's commitment to use a DBE contractor whose participation is being utilized to meet the DBE goal; and
- Written and signed confirmation from the DBE that it is participating in the contract as provided in the prime contractor's commitment.

UPON AWARD AND BEFORE A WORK ORDER WILL BE ISSUED

Contractors must submit the signed subcontract between the contractor and the DBE contractor, the DBE's certificate of insurance, and an affidavit for bidders, offerors, and contractors from the DBE to the Division of Construction Procurement. The affidavit can be found on the Construction Procurement website. If the DBE is a supplier of materials for the project, a signed purchase order and an affidavit for bidders, offerors, and contractors must be submitted to the Division of Construction Procurement.

Changes to DBE Participation Plans must be approved by the Cabinet. The Cabinet may consider extenuating circumstances including, but not limited to, changes in the nature or scope of the project, the inability or unwillingness of a DBE to perform the work in accordance with the bid, and/or other circumstances beyond the control of the prime contractor.

CONSIDERATION OF GOOD FAITH EFFORTS REQUESTS

If the DBE participation submitted in the bid by the apparent lowest responsive bidder does not meet or exceed the DBE contract goal, the apparent lowest responsive bidder must submit a Good Faith Effort Package to satisfy the Cabinet that sufficient good faith efforts were made to meet the contract goals prior to submission of the bid. Efforts to increase the goal after bid submission will not be considered in justifying the good faith effort, unless the contractor can show that the proposed DBE was solicited prior to the letting date. DBEs utilized in achieving the DBE goal must be certified and prequalified for the work items at the time the bid is submitted. One complete set and nine (9) copies of this information must be received in the

office of the Division of Contract Procurement no later than 12:00 noon of the tenth calendar day after receipt of notification that they are the apparent low bidder.

Where the information submitted includes repetitious solicitation letters it will be acceptable to submit a sample representative letter along with a distribution list of the firms solicited. Documentation of DBE quotations shall be a part of the good faith effort submittal as necessary to demonstrate compliance with the factors listed below which the Cabinet considers in judging good faith efforts. This documentation may include written subcontractors' quotations, telephone log notations of verbal quotations, or other types of quotation documentation.

The Good Faith Effort Package shall include, but may not be limited to information showing evidence of the following:

- Whether the bidder attended any pre-bid meetings that were scheduled by the Cabinet to inform DBEs of subcontracting opportunities;
- Whether the bidder provided solicitations through all reasonable and available means;
- Whether the bidder provided written notice to all DBEs listed in the DBE directory at the time of the letting who are prequalified in the areas of work that the bidder will be subcontracting;
- Whether the bidder followed up initial solicitations of interest by contacting DBEs to determine with certainly whether they were interested. If a reasonable amount of DBEs within the targeted districts do not provide an intent to quote or no DBEs are prequalified in the subcontracted areas, the bidder must notify the DBE Liaison in the Office of Minority Affairs to give notification of the bidder's inability to get DBE quotes;
- Whether the bidder selected portions of the work to be performed by DBEs in order to increase the likelihood of meeting the contract goals. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate DBE participation, even when the prime contractor might otherwise perform these work items with its own forces;
- Whether the bidder provided interested DBEs with adequate and timely information about the plans, specifications, and requirements of the contract;
- Whether the bidder negotiated in good faith with interested DBEs not rejecting them as unqualified without sound reasons based on a thorough investigation of their capabilities. Any rejection should be so noted in writing with a description as to why an agreement could not be reached;
- Whether quotations were received from interested DBE firms but were rejected as unacceptable without sound reasons why the quotations were considered unacceptable. The fact that the DBE firm's quotation for the work is not the lowest quotation received will not in itself be considered as a sound reason for rejecting the quotation as unacceptable. The fact that the bidder has the ability and/or desire to perform the contract work with its own forces will not be considered a sound reason for rejecting a DBE quote. Nothing in this provision shall be construed to require the bidder to accept unreasonable quotes in order to satisfy DBE goals;
- 9 Whether the bidder specifically negotiated with subcontractors to assume part of the responsibility to meet the contract DBE goal when the work to be subcontracted includes potential DBE participation;
- Whether the bidder made any efforts and/or offered assistance to interested DBEs in obtaining the necessary equipment, supplies, materials, insurance and/or bonding to satisfy the work requirements of the bid proposal; and
- Any other evidence that the bidder submits which may show that the bidder has made reasonable good faith efforts to include DBE participation.

FAILURE TO MEET GOOD FAITH REQUIREMENT

Where the apparent lowest responsive bidder fails to submit sufficient participation by DBE firms to meet the contract goal and upon a determination by the Good Faith Committee based upon the information submitted that the apparent lowest responsive bidder failed to make sufficient reasonable efforts to meet the contract goal, the bidder will be offered the opportunity to meet in person for administrative reconsideration. The bidder will be notified of the Committee's decision within 24 hours of its decision. The bidder will have 24 hours to request reconsideration of the Committee's decision. The reconsideration meeting will be held within two days of the receipt of a request by the bidder for reconsideration.

The request for reconsideration will be heard by the Office of the Secretary. The bidder will have the opportunity to present written documentation or argument concerning the issue of whether it met the goal or made an adequate good faith effort. The bidder will receive a written decision on the reconsideration explaining the basis for the finding that the bidder did or did not meet the goal or made adequate Good Faith efforts to do so.

The result of the reconsideration process is not administratively appealable to the Cabinet or to the United States Department of Transportation.

The Cabinet reserves the right to award the contract to the next lowest responsive bidder or to rebid the contract in the event that the contract is not awarded to the low bidder as the result of a failure to meet the good faith requirement.

SANCTIONS FOR FAILURE TO MEET DBE REQUIREMENTS OF THE PROJECT

Failure by the prime contractor to fulfill the DBE requirements of a project under contract or to demonstrate good faith efforts to meet the goal constitutes a breach of contract. When this occurs, the Cabinet will hold the prime contractor accountable, as would be the case with all other contract provisions. Therefore, the contractor's failure to carry our the DBE contract requirements shall constitute a breach of contract and as such the Cabinet reserves the right to exercise all administrative remedies at its disposal including, but not limited to the following:

- Disallow credit toward the DBE goal;
- Withholding progress payments;
- Withholding payment to the prime in an amount equal to the unmet portion of the contract goal; and/or
- Termination of the contract.

PROMPT PAYMENT

The prime contractor will be required to pay the DBE within seven (7) working days after he or she has received payment from the Kentucky Transportation Cabinet for work performed or materials furnished.

CONTRACTOR REPORTING

All contractors must keep detailed records and provide reports to the Cabinet on their progress in meeting the DBE requirement on any highway contract. These records may include, but shall not be limited to payroll, lease agreements, cancelled payroll checks, executed subcontracting agreements, etc. Prime contractors will be required to complete and submit a signed and notarized affidavit (TC 18-7) and copies of checks for any monies paid to each DBE subcontractor or supplier utilized to meet a DBE goal. These documents must be submitted within 10 days of being paid by the Cabinet.

Payment information that needs to be reported includes date the payment is sent to the DBE, check number, Contract ID, amount of payment and the check date. Before Final Payment is made on this contract, the Prime Contractor will certify that all payments were made to the DBE subcontractor and/or DBE suppliers.

The Prime Contractor should supply the payment information at the time the DBE is compensated for their work. Form to use is located at: http://transportation.ky.gov/Construction/Pages/Subcontracts.aspx

The prime contractor should notify the KYTC Office of Civil Rights and Small Business Development seven (7) days prior to DBE contractors commencing work on the project. The contact is Melvin Bynes and the telephone number is (502) 564-3601.

Photocopied payments and completed, signed and notarized affidavit must be submitted by the Prime Contractor to: Office of Civil Rights and Small Business Development 6th Floor West 200 Mero Street Frankfort, KY 40622

DEFAULT OR DECERTIFICATION OF THE DBE

If the DBE subcontractor or supplier is decertified or defaults in the performance of its work, and the overall goal cannot be credited for the uncompleted work, the prime contractor may utilize a substitute DBE or elect to fulfill the DBE goal with another DBE on a different work item. If after exerting good faith effort in accordance with the Cabinet's Good Faith Effort policies and procedures, the prime contractor is unable to replace the DBE, then the unmet portion of the goal may be waived at the discretion of the Cabinet.

3/24/2016

<u>LEGAL REQUIREMENTS AND RESPONSIBILITY TO THE PUBLIC – CARGO PREFERENCE ACT (CPA).</u>

(REV 12-17-15) (1-16)

SECTION 7 is expanded by the following new Article:

102.10 <u>Cargo Preference Act – Use of United States-flag vessels.</u>

Pursuant to Title 46CFR Part 381, the Contractor agrees

- To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels.
- To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph 1 of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590.
- To insert the substance of the provisions of this clause in all subcontracts issued pursuant to this contract.

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TRAINEES

In Compliance with the "TRAINING SPECIAL PROVISION" included in Part III of the Proposal, the Contractor will be required to employ a trainee(s) for this contract.

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PROJECT TRAFFIC COORDINATOR (PTC)

Be advised this project is a significant project pursuant to section 112.03.12.

ASPHALT MIXTURE

Unless otherwise noted, the Department estimates the rate of application for all asphalt mixtures to be 110 lbs/sy per inch of depth.

DGA BASE

Unless otherwise noted, the Department estimates the rate of application for DGA Base to be 115 lbs/sy per inch of depth.

DGA BASE FOR SHOULDERS

Unless otherwise noted, the Department estimates the rate of application for DGA Base for Shoulders to be 115 lbs/sy per inch of depth. The Department will not measure necessary grading and/or shaping of existing shoulders prior to placing of DGA Base, but shall be incidental to the Contract unit price per ton for DGA Base.

Accept payment at the Contract unit price per ton as full compensation for all labor, materials, equipment, and incidentals for grading and/or shaping of existing shoulders and furnishing, placing, and compacting the DGA Base.

INCIDENTAL SURFACING

The Department has included in the quantities of asphalt mixtures established in the proposal estimated quantities required for resurfacing or surfacing mailbox turnouts, farm field entrances, residential and commercial entrances, curve widening, ramp gores and tapers, and road and street approaches, as applicable. Pave these areas to the limits as shown on Standard Drawing RPM-110-06 or as directed by the Engineer. In the event signal detectors are present in the intersecting streets or roads, pave the crossroads to the right of way limit or back of the signal detector, whichever is the farthest back of the mainline. Surface or resurface these areas as directed by the Engineer. The Department will not measure placing and compacting for separate payment but shall be incidental to the Contract unit price for the asphalt mixtures.

FUEL AND ASPHALT PAY ADJUSTMENT

The Department has included the Contract items Asphalt Adjustment and Fuel Adjustment for possible future payments at an established Contract unit price of \$1.00. The Department will calculate actual adjustment quantities after work is completed. If existing Contract amount is insufficient to pay all items on the contract with the adjustments, the Department will establish additional monies with a change order.

ASPHALT PAVEMENT RIDE QUALITY CATEGORY A

The Department will apply Pavement Rideability Requirements on this project in accordance with Section 410, Category A.

OPTION A

Be advised that the Department will accept compaction of asphalt mixtures furnished for driving lanes and ramps, at 1 inch (25mm) or greater, on this project according to OPTION A in accordance with Section 402 and Section 403 of the current Standard Specifications. The Department will require joint cores as described in Section 402.03.02 for surface mixtures only. The Department will accept compaction of all other asphalt mixtures according to OPTION B.

MATERIAL TRANSFER VEHICLE (MTV)

Provide and use a MTV in accordance with Sections 403.02.10 and 403.03.05.

BARRIER WALL GATE GENERAL SPECIFICATIONS

I. GENERAL

- A. The gate shall be a crashworthy longitudinal barrier, which opens to varying lengths depending on the number of sections.
- B. The gate profile shall not exceed 546mm (21.5 in.) wide by 813mm (32 in.) tall and the gate shall be comprised of at least 2 segments each weighing approximately 395 kg (871 lbs.).
- C. The gate is designed for sites with less than 5% longitudinal grade and less than 4% lateral cross slope.

II. <u>DESCRIPTION OF SYSTEM</u>

- A. The gate shall be constructed of 2 or more segments and 2 or more hinge connector segments that pin together. These sections shall be place at the center of an opening in concrete median barrier to form a continuous longitudinal barrier. The segments shall be pinned together and easily unpinned and moved to form an opening for vehicle access.
- B. The sides of the gate assemblies shall be constructed of AASHTO M180 thrie-beam panel and lower skirt sections should have sufficient tensile strength to resist design speed vehicle impacts.
- C. Exterior and most interior surfaces shall be corrosion resistant per ASTM A-123.
- D. The outermost ends of the segments shall be equipped with hinge connector and transition sections that attach to concrete median barrier (CMB) wall assemblies.
- E. Each segment shall be equipped with wheels attached to jacks to allow the segments lifted and rolled as required.
- F. The hinge connector section shall join to adjacent segments via removable steel pins. The connector segments shall pivot around a joint at the bottom of the lower skirt section of the connector.

- G. The transition sections shall be anchored to the roadway.
- H. The PCMB sections adjacent to the transitions shall be anchored to the roadway.

III. PERFORMANCE CRITERIA

- A. The gate shall be fully tested to and meet the recommended structural adequacy, occupant risk, and vehicle trajectory criteria set forth in the National Cooperative Highway Research Program Report 350 for the Test Level 3 for Longitudinal Barriers, impact conditions of 820 to 2000 kg (1808 to 4409 lb.) vehicles at speeds to 100 km/h (62.2 mph) and angles up to 25 degrees when properly installed according to the manufacturer's recommendations.
- B. The gate shall be capable of preventing vehicle penetration, vaulting, and under-riding during Test Level 3 Length Of Need with Transition (TL-3 LON/T) impacts and shall smoothly redirect the vehicle.
- C. For TL-3 LON/T impacts, detached debris shall not show potential for penetrating the vehicle occupant compartment or present a hazard to other traffic, pedestrians or workers in a work zone. The vehicle shall remain upright during and after the collision. Moderate rolling, pitching, and yawing may occur.
- D. The impact velocity of a hypothetical front seat passenger against the vehicle interior, as calculated from the longitudinal vehicle acceleration and 600mm (23 5/8 in.) forward displacement, and the lateral vehicle acceleration and 300mm (1ft.) lateral displacement shall be less than 12 m/s (39.3 ft./s). The highest 10 ms average vehicle acceleration in the longitudinal and lateral directions subsequent to the instant of passenger impact shall be less than 20 g's.
- E. The gate shall be fully operational after minor impacts and must remain a positive physical and visual barrier before and after design speed impacts.
- F. The gate shall be resistant to jamming from -30 to 50°C (-22 to 122°F) in the absence of snow and ice and/or severe debris buildups.

IV. DESIGN AND SELECTION CRITERIA

- A. Design, selection, and placement of the gate shall conform to applicable guidelines in:
 - 1. U.S. Department of Transportation. Federal Highway Administration. "Manual on Uniform Traffic Control Devices" Washington, D.C. U.S. Government Printing Office, 1988.
 - 2. American Association of State Highway and Transportation Officials. "Roadside Design Guide" Washington, D.C.: AASHTO, 1989.
- B. Installation of the gate shall be accomplished in accordance with manufacturers' recommendation.

SPECIAL NOTE FOR INTELLIGENT COMPACTION OF ASPHALT MIXTURES

This Special Note will apply when indicated on the plans or in the proposal. Section references herein are to the Department's Standard Specifications for Road and Bridge Construction current edition.

- **1.0 DESCRIPTION.** Provide and use Intelligent Compaction (IC) Rollers for compaction of all asphalt mixtures.
- **2.0 MATERIALS AND EQUIPMENT.** In addition to the equipment specified in Subsection 403.02, a minimum of one (1) IC roller is to be used on the project at all times. The Contractor may elect to only use one (1) IC roller for compaction as the breakdown or intermediate roller. All IC rollers will meet the following minimum characteristics:
 - Are self propelled double-drum vibratory rollers equipped with accelerometers mounted in or about the drum to
 measure the interactions between the rollers and compacted materials in order to evaluate the applied compactive
 effort. The IC rollers must have the approval of the Engineer prior to use. Examples of rollers equipped with IC
 technology can be found at www.IntelligentCompaction.com.
 - 2) Are equipped with non-contact temperature sensors for measuring pavement surface temperatures.
 - 3) The output from the roller is designated as the IC-MV which represents the stiffness of the materials based on the vibration of the roller drums and the resulting response from the underlying materials.
 - 4) Are equipped with integrated on-board documentation systems that are capable of displaying real-time color-coded maps of IC measurement values including the stiffness response values, location of the roller, number of roller passes, machine settings, together with the material temperature, speed and the frequency and amplitude of roller drums. Ensure the display unit is capable of transferring the data by means of a USB port.
 - 5) Are equipped with a mounted Global Positioning System GPS radio and receiver either a Real Time Kinematic (RTK-GPS) or Global Navigational Satellite System (GNSS) units that monitor the location and track the number of passes of the rollers. Accuracy of the positioning system is to be a minimum of 12 inches.
 - **3.0 WORK PLAN.** Submit to the Engineer an IC Work Plan at the Preconstruction Conference and at least 2 weeks prior to the beginning construction. Describe in the work plan the following:
 - 1. Compaction equipment to be used including:
 - Vendor(s)
 - Roller model(s),
 - Roller dimensions and weights,
 - Description of IC measurement system,
 - GPS capabilities,
 - Documentation system,
 - Temperature measurement system, and
 - Software.
 - 2. Roller data collection methods including sampling rates and intervals and data file types.
 - 3. Transfer of data to the Engineer including method, timing, and personnel responsible. Data transfer shall occur at minimum twice per day or as directed by the Engineer, and is to be either electronic or digital.
 - 4. Training plan and schedule for roller operators, project foreman, project surveyors, and Cabinet personnel; including both classroom and field training. Training should be conducted at least 1 week before beginning IC construction. The training is to be performed by a qualified representative(s) from the IC Roller manufacture(s) to be used on the project.
- **4.0 CONSTRUCTION.** Do not begin work until the Engineer has approved the IC submittals and the IC equipment.

Follow requirements established in Section 400 for production and placement, materials, equipment, acceptance plans and adjustments except as noted or modified in this Specification. Provide the Engineer at least one day's notice prior to beginning construction or prior to resuming production if operations have been temporarily suspended. Ensure paving equipment complies with all requirements specified in Section 400. The IC roller temperatures will be evaluated by the Department with the data from a Paver Mounted Infrared Temperature Gauge.

A. Pre-Construction Test Section(s) Requirements

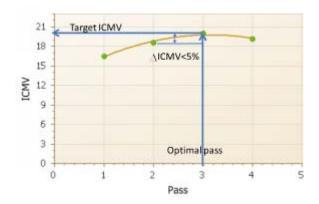
- 1. Prior to the start of production, ensure the proper setup of the GPS, IC roller(s) and the rover(s) by conducting joint GPS correlation and verification testing between the Contractor, GPS representative and IC roller manufacturer using the same datum.
 - 1. Ensure GPS correlation and verification testing includes the following minimum processes:
 - a. Establish the GPS system to be used either one with a base station or one with mobile receivers only. Ensure all components in the system are set to the correct coordinate system; then,
 - Verify that the roller and rover are working properly and that there is a connection with the base station;
 then,
 - c. Record the coordinates of the two edges where the front drum of the roller is in contact with the ground from the on-board, color-coded display; then,
 - d. Mark the locations of the roller drum edges and move the roller, and place the mobile receiver at each mark and record the readings; then,
 - 2. Compare coordinates between the roller and rover receivers. If the coordinates are within 12.0 in. of each other, the comparison is acceptable. If the coordinates are not within 12.0 in., diagnose and perform necessary corrections and repeat the above steps until verification is acceptable.
 - 3. Do not begin work until acceptable GPS correlation and verification has been obtained.
 - 4. The Contractor and the Department should conduct random GPS verification testing during production to ensure data locations are accurate. The recommended rate is once per day with a requirement of at least once per week.
 - 5. All acceptance testing shall be as outlined in Standard Specifications section 400.

B. Construction Test Section(s) Requirements

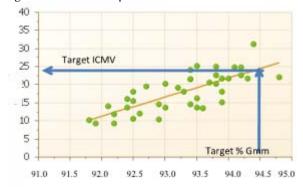
Construct test section(s) at location(s) agreed on by the Contractor and the Engineer within the project limits. The test section is required to determine a compaction curve of the asphalt mixtures in relationship to number of roller passes and to the stiffness of mixture while meeting the Department in-place compaction requirements. All rollers and the respective number of passes for each is to be determined via control strip each time a material change, equipment change or when the Engineer deems necessary.

Conduct test section(s) on every lift and every asphalt mixture. Ensure test section quantities 500 to 1,000 tons of mainline mixtures. Operate IC rollers in the low to medium amplitude range and at the same settings (speed, frequency) throughout the section while minimizing overlapping of the roller, the settings are to be used throughout the project with no changes. After each roller pass, the qualified technician from the contractor observed by the Department will use a nondestructive nuclear gauge that has been calibrated to the mixture to estimate the density of the asphalt at 10 locations uniformly spaced throughout the test section within the width of a single roller pass. The density readings and the number of roller passes needed to achieve the specified compaction will be recorded. The estimated target density will be the peak of the average of the nondestructive readings within the desired compaction temperature range for the mixture. The IC roller data in conjunction with the Veda software will create an IC compaction curve for the mixture. The target IC-MV is the point when the increase in the IC-MV of the material between passes is less than 5 percent on the compaction curve.

The IC compaction curve is defined as the relationship between the IC-MV and the roller passes. A compaction curve example is as follows:



Subsequent to the determination of the target IC-MV, compact an adjoining > 250 < 500 tons section using same roller settings and the number of estimated roller passes and allow the Department to verify the compaction with the same calibrated nondestructive nuclear gauge following the final roller pass. The Department will obtain cores at 10 locations (No cores for calibration are to be taken in the surface layer, use non-destructive density results only!!) uniformly spaced throughout the test section within the width of the single roller. Obtain GPS measurement of the core locations with a GPS rover. Use the Veda software to perform least square linear regression between the core data and IC-MV in order to correlate the production IC-MV values to the Department specified in-place air voids. A sample linear regression curve example is as follows.



C. Construction Requirements

Use the IC roller on all lifts and types of asphalt within the limits of the project.

Ensure the optimal number of roller passes determined from the test sections has been applied to a minimum coverage of 80% of the individual IC Construction area. Ensure a minimum of 75% of the individual IC Construction area meets the target IC-MV values determined from the test sections.

Do not continue paving operations if IC Construction areas not meeting the IC criteria are produced until they have been investigated by the Department. Obtain the Engineer's approval to resume paving operations. Non-IC rollers are allowed to be used as the third roller on the project; one of the breakdown or the finish rollers is to be equipped with IC technology.

IC Construction areas are defined as subsections of the project being worked continuously by the Contractor. The magnitude of the IC Construction areas may vary with production but must be at least 750 tons per mixture for evaluation.

Partial IC Construction areas of < 750 tons will be included in the previous area evaluation. IC Construction areas may extend over multiple days depending on the operations.

The IC Construction Operations Criteria does not affect the Department's acceptance processes for the materials or construction operations

5.0 MEASUREMENT. The Department will measure the total tons of asphalt mixtures compacted using the IC roller(s). Compaction is to be performed by a minimum of one IC roller, material compacted by rollers not equipped with properly functioning IC equipment will not be accepted for payment of the bid item asphalt mixtures IC rolled. Use of non-IC rollers can be accepted on small areas due to equipment malfunctions at the written approval of the Engineer. Paving operations should be suspended for equipment malfunctions that will extend over three days of operation.

6.0 PAYMENT. The Department will make payment for the completed and accepted quantities under the following:

- 1. Payment is full compensation for all work associated with providing IC equipped rollers, transmission of electronic data files, two copies of IC roller manufacturer software, and training.
- 2. Delays due to GPS satellite reception of signals to operate the IC equipment or IC roller breakdowns will not be considered justification for contract modifications or contract extensions.

CodePay ItemPay Unit24781ECIntelligent Compaction for AsphaltTON

May 4, 2015

SPECIAL NOTE FOR INTELLIGENT COMPACTION OF AGGREGATE BASES AND SOILS

This Special Note will apply when indicated on the plans or in the proposal. Section references herein are to the Department's current edition of the Standard Specifications for Road and Bridge Construction.

- **1.0 DESCRIPTION.** Provide and use Intelligent Compaction (IC) Rollers for compaction of Aggregate bases, soil, and soil rock mixtures.
- **2.0 MATERIALS AND EQUIPMENT.** The Contractor shall supply sufficient numbers of rollers and other associated equipment necessary to complete the compaction requirements for the specific materials. The Contractor will determine the number of IC rollers to use depending on the scope of the project. The IC roller(s) may be utilized during production with other standard compaction equipment and shall be used for the evaluation of the compaction operations. Provide at least one (1) roller to be used on the project with the following minimum characteristics:
 - Are self propelled vibratory rollers equipped with machine drive power and/or accelerometers mounted in or about the drum to measure the interactions between the rollers and compacted materials in order to evaluate the applied Compactive effort. www.IntelligentCompaction.com contains a list of acceptable rollers equipped with IC technology.
 - IC rollers can be either smooth drums or pad footed drums based on the type needed for the aggregate base or soil types to compact.
 - 3) The output from the roller is designated as the IC-MV which represents the stiffness of the materials based on the vibration of the roller drums and the resulting response from the underlying materials, or the machine drive power value.
 - 4) Are equipped with integrated on-board documentation systems that are capable of displaying real-time color-coded maps of IC measurement values including the stiffness response values, location of the roller, number of roller passes, machine settings, together with the speed, the frequency and amplitude of roller drums. Ensure the display unit is capable of transferring the data by means of a USB port.
 - 5) Are equipped with a mounted Global Positioning System GPS radio and receiver either a Real Time Kinematic (RTK-GPS) or Global Navigational Satellite System (GNSS) units that monitor the location and track the number of passes of the rollers. Accuracy of the positioning system must be within 12 inches.
 - **3.0 WORK PLAN.** Submit to the Engineer an IC Work Plan at the Preconstruction Conference and/or at least 2 weeks prior to beginning the corresponding construction activates. Describe in the work plan the following:
 - 1. Compaction equipment to be used including:
 - Vendor(s)

- Roller model(s),
- Roller dimensions and weights,
- Description of IC measurement system,
- GPS capabilities,
- Documentation system,
- Software.
- 2. Roller data collection methods including sampling rates and intervals and data file types.
- 3. Transfer of data to the Engineer including method, timing, and personnel responsible. Data transfer shall occur at minimum twice per day or as directed by the Engineer. Data transfer is to be by electrical or digital means.
- 4. Provide the Section Engineer with a new laptop computer with the following minimum requirements: Windows 7 Pro 64bit, 2.0GHz processor, 32GB RAM, 500GB hard drive, DVD drive (reads and writes DVD/CD), and 14 inch display. This will become the property of the Cabinet upon delivery. The Cabinet retains possession of the equipment upon completion of the project.
- 5. Provide the Section Engineer the following new GPS survey equipment; this is a sole source item to ensure compatibility with the Cabinet's existing equipment, the Cabinet retains possession of the equipment upon completion of the project:

Item	Part No.	Description	Quantity
1	R10-001-60	Trimble R10, internal 410-470 MHz radio	2
2	TSC3-01- 1120	Trimble TSC3, w/Trimble Access, with internal radio QWERTY Keypad	1
	SA-ROADS-		
3	Р	Trimble Access – Roads Perpetual License	1
4	43169-00	Rod - 2.0m Carbon Fiber Range Pole with Bipod	1
5	82758-00	Trimble TSC3 Accessory - Range Pole Bracket	1
6	74450-14	TDL 450H Field Battery Charger Kit	1
7	74450-96	TDL 450H – 35W Radio System Kit; 450-470 MHz	1
8	12178	Tripod - Wooden Medium Duty	1
	74450-50-		
9	70	Antenna kit with 1.8m mast	1
10	28959-00	Tripod-Adjustable height 2M for GPS base	1

6. Training plan and schedule for roller operators, project foreman, project surveyors, and Cabinet personnel; including both classroom and field training from the equipment manufacturer. Training should be conducted at least 1 week before beginning IC construction. The training is to be performed by a qualified representative(s) from the IC Roller manufacture(s) to be used on the project.

4.0 CONSTRUCTION. Prior to the start of production, ensure the proper setup of the GPS, IC roller(s) and the rover(s) by conducting joint GPS correlation and verification

testing between the Contractor, GPS representative and IC roller manufacturer using the same datum. Use the project datum system (Northing, Easting and Elevation) when applicable.

- Ensure GPS correlation and verification testing includes the following minimum processes:
 - a. Establish the GPS system to be used either one with a base station or one with mobile receivers only. Ensure all components in the system are set to the correct coordinate system; then,
 - Verify that the roller and rover are working properly and that there is a connection with the base station; then,
 - Record the coordinates of the two edges where the front drum of the roller is in contact with the ground from the on-board, color-coded display; then,
 - d. Mark the locations of the roller drum edges and move the roller, and place the mobile receiver at each mark and record the readings; then; then.
- 2. Compare coordinates between the roller and rover receivers. If the coordinates are within 12.0 in. of each other, the comparison is acceptable. If the coordinates are not within 12.0 in., diagnose and perform necessary corrections and repeat the above steps until verification is acceptable.
- 3. Do not begin work until acceptable GPS correlation and verification has been obtained. The Contractor and the Department should conduct random GPS verification testing during production to ensure data locations are accurate. The recommended rate is once per day with a requirement of at least once per week.
- 4. A test strip is to be used for all materials (DGA, CSB, and soil) as outlined and sized in section 302.03.04 to determine optimum rolling pattern, for all materials, and the target density for aggregate bases. A new test strip will be required anytime the material changes, equipment changes, or proper compaction has not been obtained for two (2) consecutive test locations.
- All acceptance testing shall be as outlined in Standard Specifications sections 200 and 300.
- 6. Any areas a minimum of 50 square feet in area not achieving the 80% of the stiffness value determined by the latest control strip shall be tested by other means approved by the Engineer. If the material doesn't pass the testing is shall be repaired based on current standards to the satisfaction of the Engineer.

5.0 MEASUREMENT. The Department will measure the total tons of aggregate base (DGA and/or CSB) and total cubic yards of soil compacted using the IC roller(s). The use of non-IC rollers is allowed on this project, but an IC roller must be used as well.

- **6.0 PAYMENT.** The Department will make payment for the completed and accepted quantities under the following:
 - 1. All areas with a minimum of 80% pass coverage and 75% required stiffness readings.
 - 2. Payment is full compensation for all work associated with providing IC equipped rollers, transmission of electronic data files, all required survey equipment and computer, two copies of IC roller manufacturer software, and training.
 - 3. Delays due to GPS satellite reception of signals to operate the IC equipment or IC roller breakdowns will not be considered justification for contract modifications or contract extensions.

CodePay ItemPay Unit24779ECIntelligent Compaction for SoilCY24780ECIntelligent Compaction for AggregateTON

March 2, 2015

I-75, Rockcastle County FD52 102 0075 064-069; NHPP IM 0753 (092)

SPECIAL NOTE FOR FIXED COMPLETION DATE

Fixed Completion Date

This project will have a fixed completion date of October 31, 2018 for completion of all work associated with this project.

Liquidated damages per the Standard Specifications will be charged for each calendar day that all work is not completed after October 31, 2018.

Contrary to Section 108.09 of the Standard Specifications, <u>Liquidated Damages per the Standard Specifications will be charged during the months of December through March for all work that is not complete.</u>

SPECIAL NOTE FOR PIPELINE INSPECTION

- 1.0 **DESCRIPTION.** The Department will perform visual inspections on all pipe on the project. A video inspection will be required on projects having more than 250 linear feet of storm sewer and/or culvert pipe and on routes with an ADT of greater than 1,000 vehicles. Conduct video inspections on all pipe located under the roadway and 50 percent of the remaining pipe not under the roadway. Storm sewer runs and outfall pipes not under the roadway take precedence over rural entrance pipes. Contractors performing this item of work must be prequalified with the Department in the work type J51 (Video Pipe Inspection and Cleaning). Deflection testing shall be completed using a mandrel in accordance with the procedure outlined below or by physical measurement for pipes greater than 36inches in diameter. Mandrel testing for deflection must be completed prior to the video inspection testing. Unless otherwise noted, Section references herein are to the Department's 2012 Standard Specifications for Road and Bridge Construction.
- **2.0 VIDEO INSPECTION.** Ensure pipe is clear of water, debris or obstructions. Complete the video inspection and any necessary measurement prior to placing the final surface over any pipe. When paving will not be delayed, take measurements 30 days or more after the completion of earthwork to within 1 foot of the finished subgrade. Notify the Engineer a minimum of 24 hours in advance of inspection and notify the Engineer immediately if distresses or locations of improper installation are logged.

2.1 INSPECTION FOR DEFECTS AND DISTRESSES

- **A)** Begin at the outlet end and proceed through to the inlet at a speed less than or equal to 30 ft/minute. Remove blockages that will prohibit a continuous operation.
- **B)** Document locations of all observed defects and distresses including but not limited to: cracking, spalling, slabbing, exposed reinforcing steel, sags, joint offsets, joint separations, deflections, improper joints/connections, blockages, leaks, rips, tears, buckling, deviation from line and grade, damaged coatings/paved inverts, and other anomalies not consistent with a properly installed pipe.
- C) During the video inspection provide a continuous 360 degree pan of every pipe joint.
- **D)** Identify and measure all cracks greater than 0.1" and joint separations greater than 0.5".
- **E**) Video Inspections are conducted from junction to junction which defines a pipe run. A junction is defined as a headwall, drop box inlet, curb box inlet, manhole, buried junction, or other structure that disturbs the continuity of the pipe. Multiple pipe inspections may be conducted from a single set up location, but each pipe run must be on a separate video file and all locations are to be referenced from nearest junction relative to that pipe run.
- F) Record and submit all data on the TC 64-765 and TC 64-766 forms.
- **3.0 MANDREL TESTING.** Mandrel testing will be used for deflection testing. For use on Corrugated Metal Pipe, High Density Polyethylene Pipe, and Polyvinyl Chloride Pipe,

use a mandrel device with an odd number of legs (9 minimum) having a length not less than the outside diameter of the mandrel. The diameter of the mandrel at any point shall not be less than the diameter specified in Section 3.6. Mandrels can be a fixed size or a variable size.

- **3.1** Use a proving ring or other method recommended by the mandrel manufacturer to verify mandrel diameter prior to inspection. Provide verification documentation for each size mandrel to the Engineer.
- **3.2** All deflection measurements are to be based off of the AASHTO Nominal Diameters. Refer to the chart in section 3.6.
- **3.3** Begin by using a mandrel set to the 5.0% deflection limit. Place the mandrel in the inlet end of the pipe and pull through to the outlet end. If resistance is met prior to completing the entire run, record the maximum distance achieved from the inlet side, then remove the mandrel and continue the inspection from the outlet end of the pipe toward the inlet end. Record the maximum distance achieved from the outlet side.
- **3.4** If no resistance is met at 5.0% then the inspection is complete. If resistance occurred at 5.0% then repeat 3.1 and 3.2 with the mandrel set to the 10.0% deflection limit. If the deflection of entire pipe run cannot be verified with the mandrel then immediately notify the Engineer.
- 3.5 Care must be taken when using a mandrel in all pipe material types and lining/coating scenarios. Pipe damaged during the mandrel inspection will be video inspected to determine the extent of the damage. If the damaged pipe was video inspected prior to mandrel inspection then a new video inspection is warranted and supersedes the first video inspection. Immediately notify the Engineer of any damages incurred during the mandrel inspection and submit a revised video inspection report.
- **3.6** AASHTO Nominal Diameters and Maximum Deflection Limits.

Base Pipe Diameter	AASHTO Nominal Diameter	Max. Deflection Limit	
		5.0%	10.0%
(inches)	(inches)	(inches)	
15	14.76	14.02	13.28
18	17.72	16.83	15.95
24	23.62	22.44	21.26
30	29.53	28.05	26.58
36	35.43	33.66	31.89
42	41.34	39.27	37.21
48	47.24	44.88	42.52
54	53.15	50.49	47.84
60	59.06	56.11	53.15

- **4.0 PHYSICAL MEASUREMENT OF PIPE DEFLECTION.** Alternate method for deflection testing when there is available access or the pipe is greater than 36 inches in diameter, as per 4.1. Use a contact or non-contact distance instrument. A leveling device is recommended for establishing or verifying vertical and horizontal control.
 - **4.1** Physical measurements may be taken after installation and compared to the AASHTO Nominal Diameter of the pipe as per Section 3.6. When this method is used, determine the smallest interior diameter of the pipe as measured through the center point of the pipe (D2). All measurements are to be taken from the inside crest of the corrugation. Take the D2 measurements at the most deflected portion of the pipe run in question and at intervals no greater than ten (10) feet through the run. Calculate the deflection as follows:
 - % Deflection = [(AASHTO Nominal Diameter D2) / AASHTO Nominal Diameter] x 100%

Note: The Engineer may require that preset monitoring points be established in the culvert prior to backfilling. For these points the pre-installation measured diameter (D1) is measured and recorded. Deflection may then be calculated from the following formula:

% Deflection =
$$[(D1 - D2)/D1](100\%)$$

- **4.2** Record and submit all data.
- **5.0 DEDUCTION SCHEDULE.** All pipe deductions shall be handled in accordance with the tables shown below.

FLEXIBLE PIPE DEFLECTION			
Amount of Deflection (%)	Payment		
0.0 to 5.0	100% of the Unit Bid Price		
5.1 to 9.9	50% of the Unit Bid Price (1)		
10 or greater	Remove and Replace (2)		

⁽¹⁾ Provide Structural Analysis for HDPE and metal pipe. Based on the structural analysis, pipe may be allowed to remain in place at the reduced unit price. ⁽²⁾ The Department may allow the pipe to remain in place with no pay to the Contractor in instances where it is in the best interest to the public and where the structural analysis demonstrates that the pipe should function adequately.

RIGID PIPE REMEDIATION TABLE PIPE				
Crack Width (inches)	Payment			
• 0.1	100% of the Unit Bid Price			
Greater than 0.1	Remediate or Replace (1)			

⁽¹⁾ Provide the Department in writing a method for repairing the observed cracking. Do not begin work until the method has been approved.

6.0 PAYMENT. The Department will measure the quantity in linear feet of pipe to inspect. The Department will make payment for the completed and accepted quantities under the following:

CodePay ItemPay Unit24814ECPipeline InspectionLinear Foot10065NSPipe Deflection DeductionDollars

SPECIAL NOTE

For Tree Removal

Rockcastle County I-75 Widening from milepoints 64.5 to 69.0 Item No. 8-6.3

NO CLEARING OF TREES 5 INCHES OR GREATER (DIAMETER BREAST HEIGHT) FROM JUNE 1- JULY 31.

If there are any questions regarding this note, please contact David Waldner, Director, Division of Environmental Analysis, 200 Mero Street, Frankfort, KY 40601, Phone: (502) 564-7250.

Special Note for Bridge Demolition, Renovation and Asbestos Abatement

If the project includes any bridge demolition or renovation, the successful bidder is required to notify Kentucky Division for Air Quality (KDAQ) via filing of form (DEP 7036) a minimum of 10 days prior to commencement of any bridge demolition or renovation work.

Any available information regarding possible asbestos containing materials (ACM) on or within bridges to be affected by the project has been included in the bid documents. These are to be included with the Contractor's notification filed with the KDAQ. If not included in the bid documents, the Department will provide that information to the successful bidder for inclusion in the KDAQ notice as soon as possible. If there are no documents stating otherwise, the bidders should assume there are no asbestos containing materials that will in any way affect the work.



Matthew G. Bevin
Governor

COMMONWEALTH OF KENTUCKY TRANSPORTATION CABINET

Frankfort, Kentucky 40622 www.transportation.ky.gov/

Greg ThomasSecretary

Asbestos Inspection Report

To: Andre Johannes

District: Central Office

Date: November 9, 2016

Conducted By: O'Dail Lawson

Report Prepared By: O'Dail Lawson

Project and Structure Identification

Project Number: Rockcastle 08-0006.3

Structure ID: 102B00020N

Structure Location: Ky-1505 (Brindle Bridge Road) over I-75.

Sample Description: The samples collected were negative for asbestos.

Inspection Date: October 19, 2016

Results and Recommendations

The results of the samples collected were negative for the presence of asbestos above 1%. No abatement is required at this time.

It is recommended that this report accompany the 10-Day Notice of Intent for Demolition (<u>DEP7036 Form</u>) which is to be submitted to the Kentucky Division of Air Quality prior to abatement, demolition, or renovation of any building or structure in the Commonwealth.



Analysis N#

Client Name:



MRS, Inc. Analytical Laboratory Division

Address: Rockcastle/ 102B00020N

332 West Broadway, Suite 613 Louisville, Kentucky 40202

210285

KYTC

Methodology: EPA Method 600/R-93-116

Date Analyzed:

Analyst

28-Oct-16

Winterford Mensah

(502) 495-1212 Fax: (502) 491-7111

BULK SAMPLE ASBESTOS ANALYSIS

Sampled	Ву:	O'Dail La	wson								
				%	FIBROUS	ASBESTOS		% N(ON-ASBES	TOS FIBEI	RS
Number	Calor	Layered	Fibrous	Chrysotile	Amosite	crocidolite	Others	Cellulose	Fiberglass	Syn Fiber	Other/Mat.
R20-1	Gray	Yes	No				None	2%			98%
R20-2	Gray	Yes	No				None				100%
R20-3	Black	Yes	No				None	1%			99%
		-			1	<u> </u>					
		+					<u> </u>				
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The test relates only to the items tested. This report does not represent endorsement by NVLAP or any agency of the U.S Government. Partial Reproduction of any part of this report is strictly prohibited. Samples shall be retained for (30) days,

AJHA # 102459

Reviewed By:

Chain of Custody Record

Kentucky Transportation Cabinet
200 Mero Street, 5th Floor West
Frankfort, Kentucky 40622
(502) 564-7250 fax (502) 564-5655

O'Dail Lawson o'dail lawson@ky.gov KYTC	1	Client Information KY TRANS CABINET Brindle Rielye Roman (44-1505) UJRA I-75	whe Riblye Rosse	St-Kn)	0 (30	JE-IZ VOC	
Address: 200 Mero Street Frankfarr KV	ND = None Detected FTD = Filter Tampering or Damaged	l ring or Damaged	•				
7250	Fax: 502-564-5655 N/A = Not Applicable		Samplers (signature):				
Project or Subject Reference A octor Acto	8-6.3	(NOE 000 3(4))	Dell Journ				
	Collected			Grab/	No. of Co	Cont.	
Sample ID Sample Description	Date Time	Analysis Requested	duested	Comp.	Cont. Ty	Type Preservative	ive
Ravel Guaro Rail Marne	_	Asberry bull	West Ewo	Gres 1	אניניסער	\\Z	
Racol Repleyer Paint				جَ	DAIN		
	->).		7740	7.4%		
Relinquished By:	Date/Fime:						
Received By: Windows Man	Date/Time:	9//					
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Received at Lah By:	Баче/Тіпк:						
		KYTC COC				Page 1	

ENVIRONMENTAL TRAINING CONCEPTS, INC

P.O Box 99603 Louisville, KY 40269 (502)640-2951

Certification Number: ETC-AIR-071116-00630

O'Dail Lawson

has on 07-11-2016, attended and successfully completed the requirements and passed the examination with a score of 70% of better on the entitled course.

ASBESTOS INSPECTOR REFRESHER

SOP

Training was in accordance with 40 CFR Part 763 (AHERA) approved by the Commonwealth of Kentucky, the Indiana Department of Environmental Management and Tennessee Department of Environment & Conservation The above student received requisite training for Asbestos Accreditation under Title II of the Toxic Substance Act (TSCA)

Conducted at: 1301 Kentucky Mills Drive, Louisville, KY

Name - Training Manager

T

Expiration Date: 07-11-2017

Name Instructor

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Matthew G. Bevin Governor

COMMONWEALTH OF KENTUCKY TRANSPORTATION CABINET

Frankfort, Kentucky 40622 www.transportation.ky.gov/

Greg ThomasSecretary

Asbestos Inspection Report

To: Andre Johannes

District: Central Office

Date: November 9, 2016

Conducted By: O'Dail Lawson

Report Prepared By: O'Dail Lawson

Project and Structure Identification

Project Number: Rockcastle 08-0006.3

Structure ID: 102B00035N

Structure Location: Ky-3275 (Hurricane School Road) over I-75.

Sample Description: The samples collected were negative for asbestos.

Inspection Date: October 19, 2016

Results and Recommendations

The results of the samples collected were negative for the presence of asbestos above 1%. No abatement is required at this time.

It is recommended that this report accompany the 10-Day Notice of Intent for Demolition (<u>DEP7036 Form</u>) which is to be submitted to the Kentucky Division of Air Quality prior to abatement, demolition, or renovation of any building or structure in the Commonwealth.



Analysis N#

Analyst

Contract ID: 161270 Page 41 of 172



MRS, Inc. Analytical Laboratory Division

Address: Rockcastle / 102B00035N

332 West Broadway, Suite 613 Louisville, Kentucky 40202

210286

(502) 495-1212 Fax: (502) 491-7111

BULK SAMPLE ASBESTOS ANALYSIS

Client Na	me:	KYTC				-					
Sampled	Ву:	O'Dail La	wson								
				%	FIBROUS	ASBESTOS		% NON-ASBESTOS FIBERS			
Number	Color	Layered	Fibrous	Chrysotile	Amosite	crocidolite	Others	Cellulose	Fiberglass	Syn, Fiber	Other/Mat.
R35-1	Gray	Yes	No				None	3%			97%
R35-2	Black	Yes	No				None	2%			98%
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The test relates only to the items tested. This report does not represent endorsement by NVLAP or any agency of the U.S Government, Partial Reproduction of any part of this report is strictly prohibited. Samples shall be retained for (30) days.

Winterford Mensah

AJHA # 102459 AJHA #1 02459

Reviewed By:

Chain of Custody Record

Kentucky Transportation Cabinet 200 Mero Street, 5th Floor West Frankfort, Kentucky 40622 (502) 564-7250 fax (502) 564-5655

O'Dail Lawson O'dail.lawson@ky.gov KYTC	ili.lawson@ky.gov	Client Inform Results Code	formation ode:	Client Information KY TRANS CABINET Results Code:	ET	146-	3275	*	Hurn	149-3375 Chronican School
ro Street		ND = No	ND = None Detected	-						Roan
Prankfort KY	FTD = Filter Tampering FTD = Filter Tampering Russ 502 563 5655 N/A = Not Applicable	FTD = Fil	ter Tamperi † Annlicabl	FFD = Filter Tampering or Damaged N/A = Not Applicable			٥	Orgr		
PO#:	rax. 302-204-202.		יישטווללט ז	n	Samplers (signature):			アーフジ	5	
Project or Subject Reference Rockersty 9-6.3	ckeastly 3-1	6.3	(02 B	02 B 0003 S.W.	JERN)	dum				
			Collected				Grah/	No. of	Cont.	
Sample ID Sample Description		Date	Time	¥	Analysis Requested)	Comp.	Cont.	Type	Preservative
1835-1 Guggo Rail Masrie	MASFIL	10/19/16	(2:42	Assesson bulk)	EAST END)	(Sce)	MASSIL	4	N/A
R35-2 Joins Company	۲۸۸	→	→	7			Black	1786		
										:
Relinquished By:			Date/Time:				2000			
Received By:	devine Moule	. '	Date/Time:	9//						
Relinquished By:			Date/Time;							
Received at Lab By:			Date/Fime:							
										-
				KYTC COC						Page 1

ENVIRONMENTAL TRAINING CONCEPTS, INC

P.O Box 99603 Louisville, KY 40269 (502)640-2951

Certification Number: ETC-AIR-071116-00630

O'Dail Lawson

has on 07-11-2016, attended and successfully completed the requirements and passed the examination with a score of 70% of better on the entitled course.

ASBESTOS INSPECTOR REFRESHER

SOR

Training was in accordance with 40 CFR Part 763 (AHERA) approved by the Commonwealth of Kentucky, the Indiana Department of Environmental Management and Tennessee Department of Environment & Conservation The above student received requisite training for Asbestos Accreditation under Title II of the Toxic Substance Act (TSCA)

Conducted at: 1301 Kentucky Mills Drive, Louisville, KY

Name - Training Manager

Name - Instructor

Expiration Date: 07-11-2017



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KENTUCKY TRANSPORTATION CABINET Department of Highways DIVISION OF RIGHT OF WAY & UTILITIES

TC 62-226 Rev. 01/2016 Page 1 of 1

RIGHT OF WAY CERTIFICATION

Original								
CONTRACT SITEM	W. Jak	day less	COUNTY			PROJECT # (FEDERAL)		
08-6.30		Rockcast		FD52 C102 6		NH 0753 (093)		
PROJECT DESC	RIPTION					1111 0703 (033)		
		Widen I-7	S to 6 lanes from 1.85 p	niles N Green H	iiii Road O-Pass N I	to Clay Lick Branch at Conway.		
No Addit	ional Right of	Way Res	iulrad	inies it dieeli (III VOGO O-1832 IA I	to Clay Lick Branch at Conway.		
				he right of way u	TE required in secon	rdance to FHWA regulations		
under the Unifo	rm Relocation	Assistance	and Real Property Acquisi	tions Policy Act (of 1970, as amended	i. No additional right of way or		
relocation assist	ance were req	uired for th	als project.	mona i dilej Act (11 7310, 03 dillicinger	. No additional light of way of		
Condition	n#1 (Additio	nal Right	of Way Required and C	leared)		2001 TATAN PROTUNCTURE		
All necessary rig	tht of way, Inclu	iding conti	rol of access rights when a	pplicable, have b	een acquired includ	ling legal and physical		
possession, Tria	I or appeal of c	ases may b	e pending in court but leg	al possession ha	s been obtained. Thi	ere may be some improvements		
remaining on th	e right-of-way,	but all occ	tupants have vacated the l	ands and improv	rements, and KYTC h	as physical possession and the		
rights to remove	e, salvage, or di	emolish ali	improvements and enter	on all land. Just I	Compensation has b	een paid or deposited with the		
court. All reloca	lions have beei	n relocated	i to decent, safe, and sani:	lary housing or th	hat KYTC has made a	available to displaced persons		
acequate replac	ement housing	in accord	ance with the provisions o	f the current FH1	NA directive.			
Condition	n.#.Z (Additio	nai Right	of Way Required with	aception)	生。"自然是	A STATE OF THE STA		
The right of way	has not been !	inlih sednji	ed, the right to occupy an	d to use all rights	s-of-way required fo	r the proper execution of the		
project has been	n acquireo. Son	ne parceis	may be pending in court a	nd on other parc	els full legal possess:	sion has not been obtained, but		
to remove salv:	is deen optaine	o, the occi	upants of all lands and imp	rovements have	vacated, and KYTC I	has physical possession and right		
Companyation (age, or demons	n ali impro	vements. Just Compensat	on has been pal	d or deposited with	the court for most parcels. Just		
Condition	or all periority	arceis Will	be paid or deposited with	the court prior	O AWARD of constru	uction contract		
Condition #,3 (Additional Right of Way, Required with Exception)								
The acquisition or right of occupancy and use of a few remaining parcels are not complete and/or some parcels still have occupants. All remaining occupants have had replacement housing made available to them in accordance with 49 CER 24 204, WATC is borney.								
remaining occupants have had replacement housing made available to them in accordance with 49 CFR 24.204. KYTC is hereby								
requesting authorization to advertise this project for bids and to proceed with bid letting even though the necessary right of way will not be fully acquired, and/or some occupants will not be relocated, and/or the just compensation will not be paid or deposited with the								
be fully acquired, and/or some occupants will not be relocated, and/or the just compensation will not be paid or deposited with the court for some parcels until after bid letting. KYTC will fully meet all the requirements outlined in 23 CFR 635.309(c)(3) and 49 CFR								
court for some parcels until after bid letting. KYTC will fully meet all the requirements outlined in 23 CFR 635.309(c)(3) and 49 CFR 24.102(j) and will expedite completion of all acquisitions, relocations, and full payments after bid letting and prior to								
AWARD of the c	onstruction co	ntract or fo	orce account construction.	, ,,		, and prior to		
Total Number of Par		5	EXCEPTION (5) Parcel #	ANTIC	PATED DATE OF POSSES!	NDITANAJINA HTIW NOIZ		
Number of Parcels 1	That Have Been Ac	quired						
Signed Deed		4						
Condemnation Signed ROE	_	1						
Notes/ Comment	s (Lise Additions	Chast II no	record.					
				entral Office back	in August 2011 and a	pproved by FHWA on 1/3/2012. It		
is Just being resul	mitted on the n	ew form.		THE PROPERTY	III CABASE POSS BING B	pproved by Freeze out 1/3/2012. It		
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	LPA RW Pro	ect Mana	nger T		Right of Way S			
Printed Name			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Printed Name	August of Way 3			
Signature				Signature	11/11/1/h	Charles Hale		
Date				Date	MINKELL	11/7/2016		
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Printed Name	DML			Printed Name	hohil 1	Var worth		
Signature	my	3		Signature	David	Whitworth		
Date	UI TA	ते का	102 ray	Date	11/15	11/		
			1000 CO.6	Date	11/10	140		

UTILITIES AND RAIL CERTIFICATION NOTE

ROCKCASTLE COUNTY, NHPP IM 0753 (092) FD52 102 0075 064-069 Interstate 75 Item No. 08-6.30

GENERAL PROJECT NOTE ON UTILITY PROTECTION

Utility coordination efforts determined that no significant utility relocation work is required to complete the project. Any work pertaining to these utility facilities is defined in the bid package and is to be carried out as instructed by the Kentucky Transportation Cabinet. The contractor will be responsible for any coordination or adjustments that are discussed or quantified in the proposal.

NOTE: DO NOT DISTURB THE FOLLOWING UTILITIES LOCATED WITHIN THE PROJECT DISTURB LIMITS

None when applicable

The Contractor is fully responsible for protection of all utilities listed above

THE FOLLOWING COMPANIES ARE RELOCATING/ADJUSTING THEIR UTILITIES WITHIN THE PROJECT LIMITS AND WILL BE COMPLETE PRIOR TO CONSTRUCTION

None when applicable

THE FOLLOWING COMPANIES HAVE FACILITIES TO BE RELOCATED/ADJUSTED BY THE COMPANY OR THE COMPANY'S SUBCONTRACTOR AND IS TO BE COORDINATED WITH THE ROAD CONTRACT

None when applicable

THE FOLLOWING COMPANIES HAVE FACILITIES TO BE RELOCATED/ADJUSTED BY THE ROAD CONTRACTOR AS INCLUDED IN THIS CONTRACT

None when applicable

THE FOLLOWING RAIL C	OMPANIES HAVE FACILITIES IN CONJUNCTION	N WITH THIS PROJECT AS NOTED
☑ No Rail Involved	☐ Minimal Rail Involved (See Below)	☐ Rail Involved (See Below)

UTILITIES AND RAIL CERTIFICATION NOTE

ROCKCASTLE COUNTY, NHPP IM 0753 (092) FD52 102 0075 064-069 Interstate 75 Item No. 08-6.30

UNDERGROUND FACILITY DAMAGE PROTECTION - BEFORE YOU DIG

The contractor shall make every effort to protect underground facilities from damage as prescribed in the Underground Facility Damage Protection Act of 1994, Kentucky Revised Statute KRS 367.4901 to 367.4917. It is the contractor's responsibility to determine and take steps necessary to be in compliance with federal and state damage prevention directives. The contractor is instructed to contact KY 811 for the location of existing underground utilities. Contact shall be made a minimum of two (2) and no more than ten (10) business days prior to excavation.

The contractor shall submit Excavation Locate Requests to the Kentucky Contact Center (KY 811) via web ticket entry. The submission of this request does not relieve the contractor from the responsibility of contacting non-member facility owners, whom are to be contacted through their individual Protection Notification Center. It may be necessary for the contractor to contact the County Court Clerk to determine what utility companies have facilities in the area. Non-compliance with these directives can result in the enforcement of penalties.

<u>SPECIAL CAUTION NOTE – PROTECTION OF UTILITIES</u>

The contractor will be responsible for contacting all utility facility owners on the subject project to coordinate his activities. The contractor will coordinate his activities to minimize and, where possible, avoid conflicts with utility facilities. Due to the nature of the work proposed, it is unlikely to conflict with the existing utilities beyond minor facility adjustments. Where conflicts with utility facilities are unavoidable, the contractor will coordinate any necessary relocation work with the facility owner and Resident Engineer. The Kentucky Transportation Cabinet maintains the right to remove or alter portions of this contract if a utility conflict occurs.

The utility facilities as noted in the previous section(s) have been determined using data garnered by varied means and with varying degrees of accuracy: from the facility owners, a result of S.U.E., field inspections, and/or reviews of record drawings. The facilities defined may not be inclusive of all utilities in the project scope and are not Level A quality, unless specified as such. It is the contractor's responsibility to verify all utilities and their respective locations before excavating.

Please Note: The information presented in this Utility Note is informational in nature and the information contained herein is not guaranteed.

N O T I C E

DEPARTMENT OF THE ARMY CORPS OF ENGINEERS (NATIONWIDE PERMIT & GENERAL WQC AUTHORIZATION)

PROJECT: Rockcastle County, Item No. 8-6.30 Major Widening I 75

The Section 404 & 401 activities for this project have been previously permitted under the authority of the Department of the Army Nationwide Permit No. 14 "Linear Transportation Projects" & Division of Water General Water Quality Certification. If there is need to cross the stream channel with heavy equipment or conduct work from within the stream channel a working platform or temporary crossing is authorized. This should be constructed with clean rock and sufficient pipe to allow stream flow to continue unimpeded (see attached typical drawing). In order for these authorizations to be valid, the attached conditions must be followed. The contractor shall post a copy of this Nationwide Permit & General WQC in a conspicuous location at the project site for the duration of construction and comply with the general conditions as required.

To more readily expedite construction, the contractor may elect to alter the design or perform the work in a manner different from what was originally proposed and specified. Prior to commencing such alternative work, the contractor shall obtain **written** permission from the Division of Construction and the Corps of Engineers. A copy of any request to the Corps of Engineers to alter this proposal and subsequent responses shall be forwarded to the Division of Environmental Analysis, DA Permit Coordinator, for office records and for informational purposes.

STEVEN L. BESHEAR GOVERNOR LEONARD K. PETERS SECRETARY

ENERGY AND ENVIRONMENTAL PROTECTION CABINET

DEPARTMENT FOR ENVIRONMENTAL PROTECTION
DIVISION OF WATER
200 FAIR OAKS LANE
FRANKFORT, KENTUCKY 40601
www.kentucky.gov

General Certification--Nationwide Permit # 14 Linear Transportation Projects

This General Certification is issued March 19, 2012, in conformity with the requirements of Section 401 of the Clean Water Act of 1977, as amended (33 U.S.C. §1341), as well as Kentucky Statute KRS 224.16-050.

For this and all nationwide permits, the definition of surface water is as per 401 KAR 10:001 Chapter 10, Section 1(80): Surface Waters means those waters having well-defined banks and beds, either constantly or intermittently flowing; lakes and impounded waters; marshes and wetlands; and any subterranean waters flowing in well-defined channels and having a demonstrable hydrologic connection with the surface. Lagoons used for waste treatment and effluent ditches that are situated on property owned, leased, or under valid easement by a permitted discharger are not considered to be surface waters of the commonwealth.

Agricultural operations, as defined by KRS 224.71-100(1) conducting activities pursuant to KRS 224.71-100 (3), (4), (5), (6), or 10 are deemed to have certification if they are implementing an Agriculture Water Quality Plan pursuant to KRS 224.71-145.

For all other operations, the Commonwealth of Kentucky hereby certifies under Section 401 of the Clean Water Act (CWA) that it has reasonable assurances that applicable water quality standards under Kentucky Administrative Regulations Title 401, Chapter 10, established pursuant to Sections 301, 302, 304, 306 and 307 of the CWA, will not be violated for the activity covered under NATIONWIDE PERMIT 14, namely Linear Transportation Projects, provided that the following conditions are met:

- The activity will not occur within surface waters of the Commonwealth identified by the Kentucky Division of Water as Outstanding State or National Resource Water, Cold Water Aquatic Habitat, or Exceptional Waters.
- 2. The activity will not occur within surface waters of the Commonwealth identified as perpetually-protected (e.g. deed restriction, conservation easement) mitigation sites.
- 3. The activity will impact less than 1/2 acre of wetland/marsh.
- 4. The activity will impact less than 300 linear feet of surface waters of the Commonwealth. Stream realignment greater than 100 feet is not covered under this general water quality certification.



General Certification--Nationwide Permit # 14 Linear Transportation Projects Page 2

- For a single and complete linear transportation project, the cumulative length of impacts less than 300 linear feet of surface waters within each Hydrologic Unit Code (HUC) 14 watershed will not exceed 500 linear feet.
- Stream impacts covered under this General Water Quality Certification and undertaken by those persons defined as an agricultural operation under the Agricultural Water Quality Act must be completed in compliance with the Kentucky Agricultural Water Quality Plan (KWQP).
- 7. The Kentucky Division of Water may require submission of a formal application for an individual certification for any project if the project has been determined to likely have a significant adverse effect upon water quality or degrade the waters of the Commonwealth so that existing uses of the water body or downstream waters are precluded.
- 8. Activities that do not meet the conditions of this General Water Quality Certification require an Individual Section 401 Water Quality Certification.
- 9. Activities qualifying for coverage under this General Water Quality Certification are subject to the following conditions:
 - Erosion and sedimentation pollution control plans and Best Management Practices must be designed, installed, and maintained in effective operating condition at all times during construction activities so that violations of state water quality standards do not occur (401 KAR 10:031 Section 2 and KRS 224.70-100).
 - Sediment and erosion control measures, such as check-dams constructed of any material, silt fencing, hay bales, etc., shall not be placed within surface waters of the Commonwealth, either temporarily or permanently, without prior approval by the Kentucky Division of Water's Water Quality Certification Section. If placement of sediment and erosion control measures in surface waters is unavoidable, design and placement of temporary erosion control measures shall not be conducted in such a manner that may result in instability of streams that are adjacent to, upstream, or downstream of the structures. All sediment and erosion control devices shall be removed and the natural grade restored within the completion timeline of the activities.
 - Measures shall be taken to prevent or control spills of fuels, lubricants, or other toxic materials used in construction from entering the watercourse.
 - Removal of riparian vegetation in the utility line right-of-way shall be limited to that necessary for equipment access.
 - To the maximum extent practicable, all in-stream work under this certification shall be performed under low-flow conditions.

General Certification--Nationwide Permit # 14 Linear Transportation Projects Page 2

- Heavy equipment, e.g. bulldozers, backhoes, draglines, etc., if required for this project, should not be used or operated within the stream channel. In those instances in which such in-stream work is unavoidable, then it shall be performed in such a manner and duration as to minimize turbidity and disturbance to substrates and bank or riparian vegetation.
- Any fill shall be of such composition that it will not adversely affect the biological, chemical, or physical properties of the receiving waters and/or cause violations of water quality standards. If rip-rap is utilized, it should be of such weight and size that bank stress or slump conditions will not be created because of its placement.
- If there are water supply intakes located downstream that may be affected by increased turbidity and suspended solids, the permittee shall notify the operator when such work will be done.
- Should evidence of stream pollution or jurisdictional wetland impairment and/or violations of water quality standards occur as a result of this activity (either from a spill or other forms of water pollution), the KDOW shall be notified immediately by calling (800) 928-2380.

Non-compliance with the conditions of this general certification or violation of Kentucky state water quality standards may result in civil penalties.



Nationwide Permit No. 14, Linear Transportation Projects

Activities required for the construction, expansion, modification, or improvement of linear transportation projects (e.g., roads, highways, railways, trails, airport runways, and taxiways) in waters of the United States.

- a. For linear transportation projects in non-tidal waters, the discharge cannot cause the loss of greater than 1/2-acre of waters of the United States. For linear transportation projects in tidal waters, the discharge cannot cause the loss of greater than 1/3-acre of waters of the United States.
- b. Any stream channel modification, including bank stabilization, is limited to the minimum necessary to construct or protect the linear transportation project; such modifications must be in the immediate vicinity of the project.
- c. This NWP also authorizes temporary structures, fills, and work necessary to construct the linear transportation project. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The areas affected by temporary fills must be revegetated, as appropriate.
- d. This NWP cannot be used to authorize non-linear features commonly associated with transportation projects, such as vehicle maintenance or storage buildings, parking lots, train stations, or aircraft hangars.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity if: (1) the loss of waters of the United States exceeds

1/10-acre; or (2) there is a discharge in a special aquatic site, including wetlands. (See general condition 31.) (Sections 10 and 404)

Note: Some discharges for the construction of farm roads or forest roads, or temporary roads for moving mining equipment, may qualify for an exemption under Section 404(f) of the Clean Water Act (see 33 CFR 323.4).

Valid from March 19, 2012 through March 18, 2017

Nationwide Permit General Conditions

Note: To qualify for NWP authorization, the prospective permittee must comply with the following general conditions, as applicable, in addition to any regional or case-specific conditions imposed by the division engineer or district engineer. Prospective permittees should contact the appropriate Corps district office to determine if regional conditions have been imposed on an NWP. Prospective permittees should also contact the appropriate Corps district office to determine the status of Clean Water Act Section 401 water quality certification and/or Coastal Zone Management Act consistency for an NWP. Every person who may wish to obtain permit authorization under one or more NWPs, or who is currently relying on an existing or prior permit authorization under one or more NWPs, has been and is on notice that all of the provisions of 33 CFR §§ 330.1 through 330.6 apply to every NWP authorization. Note especially 33 CFR § 330.5 relating to the modification, suspension, or revocation of any NWP authorization.

- 1. <u>Navigation</u>. (a) No activity may cause more than a minimal adverse effect on navigation.
- (b) Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States.
- (c) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.
- 2. Aquatic Life Movements. No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. All permanent and temporary crossings of waterbodies shall be suitably culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species.
- 3. <u>Spawning Areas</u>. Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.
- 4. <u>Migratory Bird Breeding Areas</u>. Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.
- 5. Shellfish Beds. No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWPs 4 and 48, or is a shellfish seeding or habitat restoration activity authorized by NWP 27.
 - 6. Suitable Material. No activity may use unsuitable material (e.g., trash, debris, car

bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see Section 307 of the Clean Water Act).

- 7. <u>Water Supply Intakes</u>. No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.
- 8. <u>Adverse Effects From Impoundments</u>. If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.
- 9. Management of Water Flows. To the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization and storm water management activities, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).
- 10. <u>Fills Within 100-Year Floodplains</u>. The activity must comply with applicable FEMA-approved state or local floodplain management requirements.
- 11. <u>Equipment</u>. Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.
- 12. <u>Soil Erosion and Sediment Controls</u>. Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow.
- 13. <u>Removal of Temporary Fills</u>. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.
- 14. <u>Proper Maintenance</u>. Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety and compliance with applicable NWP general conditions, as well as any activity-specific conditions added by the district engineer to an NWP authorization.
- 15. <u>Single and Complete Project</u>. The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.
- 16. Wild and Scenic Rivers. No activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River

designation or study status. Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency responsible for the designated Wild and Scenic River or study river (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service).

- 17. <u>Tribal Rights</u>. No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.
- 18. Endangered Species. (a) No activity is authorized under any NWP which is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify the critical habitat of such species. No activity is authorized under any NWP which "may affect" a listed species or critical habitat, unless Section 7 consultation addressing the effects of the proposed activity has been completed.
- (b) Federal agencies should follow their own procedures for complying with the requirements of the ESA. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will review the documentation and determine whether it is sufficient to address ESA compliance for the NWP activity, or whether additional ESA consultation is necessary.
- (c) Non-federal permittees must submit a pre-construction notification to the district engineer if any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally-listed endangered or threatened species or designated critical habitat, the pre-construction notification must include the name(s) of the endangered or threatened species that might be affected by the proposed work or that utilize the designated critical habitat that might be affected by the proposed work. The district engineer will determine whether the proposed activity "may affect" or will have "no effect" to listed species and designated critical habitat and will notify the non-Federal applicant of the Corps' determination within 45 days of receipt of a complete preconstruction notification. In cases where the non-Federal applicant has identified listed species or critical habitat that might be affected or is in the vicinity of the project, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification the proposed activities will have "no effect" on listed species or critical habitat, or until Section 7 consultation has been completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.
- (d) As a result of formal or informal consultation with the FWS or NMFS the district engineer may add species-specific regional endangered species conditions to the NWPs.
- (e) Authorization of an activity by a NWP does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the U.S. FWS or the NMFS, The Endangered Species Act prohibits any person subject to the jurisdiction of the United States to take a listed species, where "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The word "harm" in the definition of "take" means an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.

- (f) Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the U.S. FWS and NMFS or their world wide web pages at http://www.fws.gov/ or http://www.fws.gov/ipac and http://www.noaa.gov/fisheries.html respectively.
- 19. Migratory Birds and Bald and Golden Eagles. The permittee is responsible for obtaining any "take" permits required under the U.S. Fish and Wildlife Service's regulations governing compliance with the Migratory Bird Treaty Act or the Bald and Golden Eagle Protection Act. The permittee should contact the appropriate local office of the U.S. Fish and Wildlife Service to determine if such "take" permits are required for a particular activity.
- 20. <u>Historic Properties</u>. (a) In cases where the district engineer determines that the activity may affect properties listed, or eligible for listing, in the National Register of Historic Places, the activity is not authorized, until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.
- (b) Federal permittees should follow their own procedures for complying with the requirements of Section 106 of the National Historic Preservation Act. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will review the documentation and determine whether it is sufficient to address section 106 compliance for the NWP activity, or whether additional section 106 consultation is necessary.
- (c) Non-federal permittees must submit a pre-construction notification to the district engineer if the authorized activity may have the potential to cause effects to any historic properties listed on, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the pre-construction notification must state which historic properties may be affected by the proposed work or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of or potential for the presence of historic resources can be sought from the State Historic Preservation Officer or Tribal Historic Preservation Officer, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). When reviewing pre-construction notifications, district engineers will comply with the current procedures for addressing the requirements of Section 106 of the National Historic Preservation Act. The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts, which may include background research, consultation, oral history interviews, sample field investigation, and field survey. Based on the information submitted and these efforts, the district engineer shall determine whether the proposed activity has the potential to cause an effect on the historic properties. Where the non-Federal applicant has identified historic properties on which the activity may have the potential to cause effects and so notified the Corps, the non-Federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects or that consultation under Section 106 of the NHPA has been completed.
- (d) The district engineer will notify the prospective permittee within 45 days of receipt of a complete pre-construction notification whether NHPA Section 106 consultation is required. Section 106 consultation is not required when the Corps determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR §800.3(a)). If NHPA section 106 consultation is required and will occur, the district engineer will notify the non-Federal applicant that he or she cannot begin work until Section 106 consultation is completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must

still wait for notification from the Corps.

- (e) Prospective permittees should be aware that section 110k of the NHPA (16 U.S.C. 470h-2(k)) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of Section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.
- 21. <u>Discovery of Previously Unknown Remains and Artifacts</u>. If you discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity authorized by this permit, you must immediately notify the district engineer of what you have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The district engineer will initiate the Federal, Tribal and state coordination required to determine if the items or remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.
- 22. <u>Designated Critical Resource Waters</u>. Critical resource waters include, NOAA-managed marine sanctuaries and marine monuments, and National Estuarine Research Reserves. The district engineer may designate, after notice and opportunity for public comment, additional waters officially designated by a state as having particular environmental or ecological significance, such as outstanding national resource waters or state natural heritage sites. The district engineer may also designate additional critical resource waters after notice and opportunity for public comment.
- (a) Discharges of dredged or fill material into waters of the United States are not authorized by NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, 50, 51, and 52 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters.
- (b) For NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, and 38, notification is required in accordance with general condition 31, for any activity proposed in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after it is determined that the impacts to the critical resource waters will be no more than minimal.
- 23. <u>Mitigation</u>. The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that adverse effects on the aquatic environment are minimal:
- (a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site).

- (b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating for resource losses) will be required to the extent necessary to ensure that the adverse effects to the aquatic environment are minimal.
- (c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse effects of the proposed activity are minimal, and provides a project-specific waiver of this requirement. For wetland losses of 1/10-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in minimal adverse effects on the aquatic environment. Compensatory mitigation projects provided to offset losses of aquatic resources must comply with the applicable provisions of 33 CFR part 332.
- (1) The prospective permittee is responsible for proposing an appropriate compensatory mitigation option if compensatory mitigation is necessary to ensure that the activity results in minimal adverse effects on the aquatic environment.
- (2) Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, wetland restoration should be the first compensatory mitigation option considered.
- (3) If permittee-responsible mitigation is the proposed option, the prospective permittee is responsible for submitting a mitigation plan. A conceptual or detailed mitigation plan may be used by the district engineer to make the decision on the NWP verification request, but a final mitigation plan that addresses the applicable requirements of 33 CFR 332.4(c)(2) (14) must be approved by the district engineer before the permittee begins work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation (see 33 CFR 332.3(k)(3)).
- (4) If mitigation bank or in-lieu fee program credits are the proposed option, the mitigation plan only needs to address the baseline conditions at the impact site and the number of credits to be provided.
- (5) Compensatory mitigation requirements (e.g., resource type and amount to be provided as compensatory mitigation, site protection, ecological performance standards, monitoring requirements) may be addressed through conditions added to the NWP authorization, instead of components of a compensatory mitigation plan.
- (d) For losses of streams or other open waters that require pre-construction notification, the district engineer may require compensatory mitigation, such as stream rehabilitation, enhancement, or preservation, to ensure that the activity results in minimal adverse effects on the aquatic environment.
- (e) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of 1/2-acre, it cannot be used to authorize any project resulting in the loss of greater than 1/2-acre of waters of the United States, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that a project already meeting the established acreage limits also satisfies the minimal impact requirement associated with the NWPs.
- (f) Compensatory mitigation plans for projects in or near streams or other open waters will normally include a requirement for the restoration or establishment, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, riparian areas may be the only compensatory mitigation required. Riparian areas should consist

of native species. The width of the required riparian area will address documented water quality or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address documented water quality or habitat loss concerns. If it is not possible to establish a riparian area on both sides of a stream, or if the waterbody is a lake or coastal waters, then restoring or establishing a riparian area along a single bank or shoreline may be sufficient. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g., riparian areas and/or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses.

- (g) Permittees may propose the use of mitigation banks, in-lieu fee programs, or separate permittee-responsible mitigation. For activities resulting in the loss of marine or estuarine resources, permittee-responsible compensatory mitigation may be environmentally preferable if there are no mitigation banks or in-lieu fee programs in the area that have marine or estuarine credits available for sale or transfer to the permittee. For permittee-responsible mitigation, the special conditions of the NWP verification must clearly indicate the party or parties responsible for the implementation and performance of the compensatory mitigation project, and, if required, its long-term management.
- (h) Where certain functions and services of waters of the United States are permanently adversely affected, such as the conversion of a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse effects of the project to the minimal level.
- 24. <u>Safety of Impoundment Structures</u>. To ensure that all impoundment structures are safely designed, the district engineer may require non-Federal applicants to demonstrate that the structures comply with established state dam safety criteria or have been designed by qualified persons. The district engineer may also require documentation that the design has been independently reviewed by similarly qualified persons, and appropriate modifications made to ensure safety.
- 25. <u>Water Quality</u>. Where States and authorized Tribes, or EPA where applicable, have not previously certified compliance of an NWP with CWA Section 401, individual 401 Water Quality Certification must be obtained or waived (see 33 CFR 330.4(c)). The district engineer or State or Tribe may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality.
- 26. Coastal Zone Management. In coastal states where an NWP has not previously received a state coastal zone management consistency concurrence, an individual state coastal zone management consistency concurrence must be obtained, or a presumption of concurrence must occur (see 33 CFR 330.4(d)). The district engineer or a State may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.
- 27. Regional and Case-By-Case Conditions. The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with

any case specific conditions added by the Corps or by the state, Indian Tribe, or U.S. EPA in its section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.

- 28. <u>Use of Multiple Nationwide Permits</u>. The use of more than one NWP for a single and complete project is prohibited, except when the acreage loss of waters of the United States authorized by the NWPs does not exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the United States for the total project cannot exceed 1/3-acre.
- 29. <u>Transfer of Nationwide Permit Verifications</u>. If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature:

"When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below."

(Transferee)	 	 	
(Date)			_

- 30. <u>Compliance Certification</u>. Each permittee who receives an NWP verification letter from the Corps must provide a signed certification documenting completion of the authorized activity and any required compensatory mitigation. The success of any required permittee-responsible mitigation, including the achievement of ecological performance standards, will be addressed separately by the district engineer. The Corps will provide the permittee the certification document with the NWP verification letter. The certification document will include:
- (a) A statement that the authorized work was done in accordance with the NWP authorization, including any general, regional, or activity-specific conditions;
- (b) A statement that the implementation of any required compensatory mitigation was completed in accordance with the permit conditions. If credits from a mitigation bank or in-lieu fee program are used to satisfy the compensatory mitigation requirements, the certification must include the documentation required by 33 CFR 332.3(1)(3) to confirm that the permittee secured the appropriate number and resource type of credits; and
 - (c) The signature of the permittee certifying the completion of the work and mitigation.

- 31. Pre-Construction Notification. (a) Timing. Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a pre-construction notification (PCN) as early as possible. The district engineer must determine if the PCN is complete within 30 calendar days of the date of receipt and, if the PCN is determined to be incomplete, notify the prospective permittee within that 30 day period to request the additional information necessary to make the PCN complete. The request must specify the information needed to make the PCN complete. As a general rule, district engineers will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity until either:
- (1) He or she is notified in writing by the district engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or
- (2) 45 calendar days have passed from the district engineer's receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 18 that listed species or critical habitat might be affected or in the vicinity of the project, or to notify the Corps pursuant to general condition 20 that the activity may have the potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that there is "no effect" on listed species or "no potential to cause effects" on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or Section 106 of the National Historic Preservation (see 33 CFR 330.4(g)) has been completed. Also, work cannot begin under NWPs 21, 49, or 50 until the permittee has received written approval from the Corps. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee may not begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).
- (b) <u>Contents of Pre-Construction Notification</u>: The PCN must be in writing and include the following information:
 - (1) Name, address and telephone numbers of the prospective permittee;
 - (2) Location of the proposed project;
- (3) A description of the proposed project; the project's purpose; direct and indirect adverse environmental effects the project would cause, including the anticipated amount of loss of water of the United States expected to result from the NWP activity, in acres, linear feet, or other appropriate unit of measure; any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity. The description should be sufficiently detailed to allow the district engineer to determine that the adverse effects of the project will be minimal and to determine the need for compensatory mitigation. Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the project and when provided results in a quicker decision. Sketches should contain sufficient detail to provide an illustrative

description of the proposed activity (e.g., a conceptual plan), but do not need to be detailed engineering plans);

- (4) The PCN must include a delineation of wetlands, other special aquatic sites, and other waters, such as lakes and ponds, and perennial, intermittent, and ephemeral streams, on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters on the project site, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many waters of the United States. Furthermore, the 45 day period will not start until the delineation has been submitted to or completed by the Corps, as appropriate;
- (5) If the proposed activity will result in the loss of greater than 1/10-acre of wetlands and a PCN is required, the prospective permittee must submit a statement describing how the mitigation requirement will be satisfied, or explaining why the adverse effects are minimal and why compensatory mitigation should not be required. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan.
- (6) If any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, for non-Federal applicants the PCN must include the name(s) of those endangered or threatened species that might be affected by the proposed work or utilize the designated critical habitat that may be affected by the proposed work. Federal applicants must provide documentation demonstrating compliance with the Endangered Species Act; and
- (7) For an activity that may affect a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, for non-Federal applicants the PCN must state which historic property may be affected by the proposed work or include a vicinity map indicating the location of the historic property. Federal applicants must provide documentation demonstrating compliance with Section 106 of the National Historic Preservation Act.
- (c) <u>Form of Pre-Construction Notification</u>: The standard individual permit application form (Form ENG 4345) may be used, but the completed application form must clearly indicate that it is a PCN and must include all of the information required in paragraphs (b)(1) through (7) of this general condition. A letter containing the required information may also be used.
- (d) <u>Agency Coordination</u>: (1) The district engineer will consider any comments from Federal and state agencies concerning the proposed activity's compliance with the terms and conditions of the NWPs and the need for mitigation to reduce the project's adverse environmental effects to a minimal level.
- (2) For all NWP activities that require pre-construction notification and result in the loss of greater than 1/2-acre of waters of the United States, for NWP 21, 29, 39, 40, 42, 43, 44, 50, 51, and 52 activities that require pre-construction notification and will result in the loss of greater than 300 linear feet of intermittent and ephemeral stream bed, and for all NWP 48 activities that require pre-construction notification, the district engineer will immediately provide (e.g., via e-mail, facsimile transmission, overnight mail, or other expeditious manner) a copy of the complete PCN to the appropriate Federal or state offices (U.S. FWS, state natural resource or water quality agency, EPA, State Historic Preservation Officer (SHPO) or Tribal Historic Preservation Office (THPO), and, if appropriate, the NMFS). With the exception of NWP 37, these agencies will have 10 calendar days from the date the material is transmitted to telephone or fax the district engineer notice that they intend to provide substantive, site-specific comments.

The comments must explain why the agency believes the adverse effects will be more than minimal. If so contacted by an agency, the district engineer will wait an additional 15 calendar days before making a decision on the pre-construction notification. The district engineer will fully consider agency comments received within the specified time frame concerning the proposed activity's compliance with the terms and conditions of the NWPs, including the need for mitigation to ensure the net adverse environmental effects to the aquatic environment of the proposed activity are minimal. The district engineer will provide no response to the resource agency, except as provided below. The district engineer will indicate in the administrative record associated with each pre-construction notification that the resource agencies' concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur. The district engineer will consider any comments received to decide whether the NWP 37 authorization should be modified, suspended, or revoked in accordance with the procedures at 33 CFR 330.5.

- (3) In cases of where the prospective permittee is not a Federal agency, the district engineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish Habitat conservation recommendations, as required by Section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act.
- (4) Applicants are encouraged to provide the Corps with either electronic files or multiple copies of pre-construction notifications to expedite agency coordination.

D. District Engineer's Decision

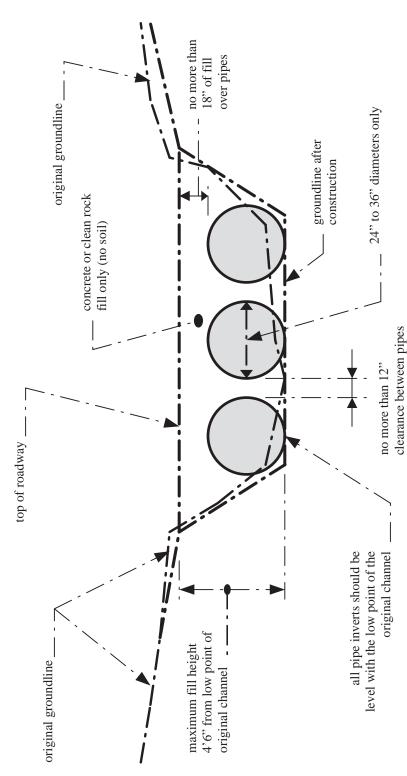
1. In reviewing the PCN for the proposed activity, the district engineer will determine whether the activity authorized by the NWP will result in more than minimal individual or cumulative adverse environmental effects or may be contrary to the public interest. For a linear project, this determination will include an evaluation of the individual crossings to determine whether they individually satisfy the terms and conditions of the NWP(s), as well as the cumulative effects caused by all of the crossings authorized by NWP. If an applicant requests a waiver of the 300 linear foot limit on impacts to intermittent or ephemeral streams or of an otherwise applicable limit, as provided for in NWPs 13, 21, 29, 36, 39, 40, 42, 43, 44, 50, 51 or 52, the district engineer will only grant the waiver upon a written determination that the NWP activity will result in minimal adverse effects. When making minimal effects determinations the district engineer will consider the direct and indirect effects caused by the NWP activity. The district engineer will also consider site specific factors, such as the environmental setting in the vicinity of the NWP activity, the type of resource that will be affected by the NWP activity, the functions provided by the aquatic resources that will be affected by the NWP activity, the degree or magnitude to which the aquatic resources perform those functions, the extent that aquatic resource functions will be lost as a result of the NWP activity (e.g., partial or complete loss), the duration of the adverse effects (temporary or permanent), the importance of the aquatic resource functions to the region (e.g., watershed or ecoregion), and mitigation required by the district engineer. If an appropriate functional assessment method is available and practicable to use, that assessment method may be used by the district engineer to assist in the minimal adverse effects determination. The district engineer may add case-specific special conditions to the NWP authorization to address site-specific environmental concerns.

- 2. If the proposed activity requires a PCN and will result in a loss of greater than 1/10acre of wetlands, the prospective permittee should submit a mitigation proposal with the PCN. Applicants may also propose compensatory mitigation for projects with smaller impacts. The district engineer will consider any proposed compensatory mitigation the applicant has included in the proposal in determining whether the net adverse environmental effects to the aquatic environment of the proposed activity are minimal. The compensatory mitigation proposal may be either conceptual or detailed. If the district engineer determines that the activity complies with the terms and conditions of the NWP and that the adverse effects on the aquatic environment are minimal, after considering mitigation, the district engineer will notify the permittee and include any activity-specific conditions in the NWP verification the district engineer deems necessary. Conditions for compensatory mitigation requirements must comply with the appropriate provisions at 33 CFR 332.3(k). The district engineer must approve the final mitigation plan before the permittee commences work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation. If the prospective permittee elects to submit a compensatory mitigation plan with the PCN, the district engineer will expeditiously review the proposed compensatory mitigation plan. The district engineer must review the proposed compensatory mitigation plan within 45 calendar days of receiving a complete PCN and determine whether the proposed mitigation would ensure no more than minimal adverse effects on the aquatic environment. If the net adverse effects of the project on the aquatic environment (after consideration of the compensatory mitigation proposal) are determined by the district engineer to be minimal, the district engineer will provide a timely written response to the applicant. The response will state that the project can proceed under the terms and conditions of the NWP, including any activity-specific conditions added to the NWP authorization by the district engineer.
- 3. If the district engineer determines that the adverse effects of the proposed work are more than minimal, then the district engineer will notify the applicant either: (a) that the project does not qualify for authorization under the NWP and instruct the applicant on the procedures to seek authorization under an individual permit; (b) that the project is authorized under the NWP subject to the applicant's submission of a mitigation plan that would reduce the adverse effects on the aquatic environment to the minimal level; or (c) that the project is authorized under the NWP with specific modifications or conditions. Where the district engineer determines that mitigation is required to ensure no more than minimal adverse effects occur to the aquatic environment, the activity will be authorized within the 45-day PCN period, with activity-specific conditions that state the mitigation requirements. The authorization will include the necessary conceptual or detailed mitigation or a requirement that the applicant submit a mitigation plan that would reduce the adverse effects on the aquatic environment to the minimal level. When mitigation is required, no work in waters of the United States may occur until the district engineer has approved a specific mitigation plan or has determined that prior approval of a final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation.

E. Further Information

- 1. District Engineers have authority to determine if an activity complies with the terms and conditions of an NWP.
- 2. NWPs do not obviate the need to obtain other federal, state, or local permits, approvals, or authorizations required by law.
 - 3. NWPs do not grant any property rights or exclusive privileges.
 - 4. NWPs do not authorize any injury to the property or rights of others.
 - 5. NWPs do not authorize interference with any existing or proposed Federal project.

ATTACHMENT 1



NOTES:

- 1. This is a conceptual drawing. The number and size of pipes and other details will vary depending on specific site conditions.
- 2. The pipes and backfill must be contained within the stream channel as shown above. During the construction of the approaches and access crushed stone, or other stable road construction materials. This may only be done, however, with the following provisions: (1) the disposal roadway across the floodplain, unstable and unconsolidated materials unsuitable for roadways may be excavated and replaced with riprap, of excess, unconsolidated materials thus excavated must be outside of the floodplain and (2) the finished surface of the completed road may be no more than three inches (3") above the pre-construction surface of the floodplain at any point beyond the top of banks.

LOW-WATER CROSSING

STANDARD DRAWING Not to Scale



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Kentucky Ecological Services Field Office 330 West Broadway, Suite 265 Frankfort, Kentucky 40601 (502) 695-0468

November 4, 2016

Mr. David Waldner
Division of Environmental Analysis
Kentucky Transportation Cabinet
200 Mero Street
Frankfort, Kentucky

Re: FWS 2017-B-0034; KYTC Item No. 8-6.3, I-75 Widening from mile point 64.5 to 69.0,

Rockcastle County, Kentucky

Dear Mr. Waldner:

Thank you for your letter and Biological Assessment (BA) dated August 10, 2016, evaluating the potential effects of the subject project proposal on the federally-listed Indiana bat, northern-long-eared bat (NLEB), gray bat, and Virginia big-eared bat. The U.S. Fish and Wildlife Service (Service) has reviewed the document and offers the following comments in accordance with the Endangered Species Act (ESA) of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.).

Your letter states that the proposed project would widen 4.5 miles of I-75 from 1.85 miles north of the Green Hill overpass (MP65.6) to Clay Lick Branch at Conway (MP69.0) in Rockcastle County, Kentucky. Specifically, the proposed project will involve widening the interstate from four lanes to six lanes with construction primarily occurring within the center median of the existing roadway; however, activities would extend beyond the existing right-of-way in a few areas. Tree clearing would be limited to the existing right-of-way and would not occur between the dates of June 1 – July 31. The Service finds the BA to be adequate and support the Kentucky Transportation Cabinet's (KYTC) effects determinations for the aforementioned bat species. We also acknowledge KYTC's "no effect" determinations for the federally-listed Cumberland bean, Cumberland elktoe, Cumberlandian combshell, oyster mussel, littlewing pearlymussel, fluted kidneyshell, rabbitsfoot, and Virginia spiraea, and have no additional comments of concerns regarding these species.

Indiana Bat / NLEB

The proposed project requires removal of approximately 75.29 acres of "Known Swarming 1" and "Potential" forested habitat for the Indiana bat and NLEB, respectively. Based on the information provided in BA, no impacts to suitable winter habitat for these species are anticipated to occur. In lieu of a presence/absence survey, KYTC is assuming presence of these species and has determined that the action "may affect, is likely to adversely affect" the Indiana bat and NLEB. KYTC proposes to account for these adverse effects to known swarming

Mr. David Waldner 2

and potential summer roosting habitat through the processes identified in the 2015 Interim Programmatic Agreement for Forest Dwelling bats between the Federal Highway Administration (FHWA), KYTC, and the Service's Kentucky Field Office. The Service concurs with KYTC's effects determination for the Indiana bat and NLEB, and agrees with the proposed ESA compliance process.

Gray Bat / Virginia Big-eared Bat

Gray bats and Virginia big-eared bats eat a variety of flying aquatic and terrestrial insects present along streams, rivers, and lakes. Perennial and strongly intermittent streams produce an abundance of insects, and are especially valuable to the species as foraging habitat. The stream(s) and/or other water bodies on the proposed project site may be used by the species for foraging. KYTC has committed to sediment and erosion control measures in the BA (Section 5.4, pages 28-34) that will be used to minimize potential adverse effects on bat foraging habitat. The analysis within the BA also determined that no occupied and/or suitable roosting habitat for the gray bat and Virginia big-eared bat would be impacted by the proposed project. Based on our review of the information provided, we concur with KYTC's determination that the proposed action may affect, but is not likely to adversely affect the gray bat and Virginia big-eared bat.

In view of these findings we believe that the requirements of section 7 of the Endangered Species Act have been fulfilled for this project. Your obligations under section 7 must be reconsidered. however, if: (1) new information reveals that the proposed action may affect listed species in a manner or to an extent not previously considered, (2) the proposed action is subsequently modified to include activities which were not considered during this consultation, or (3) new species are listed or critical habitat designated.

Thank you again for your request. Your concern for the protection of endangered and threatened species is greatly appreciated. If you have any questions regarding the information that we have provided, please contact Phil DeGarmo at (502) 695-0468 extension 110 or Phil DeGarmo@fws.gov.

Jennfu Larland 401 Virgil Lee Andrews, Jr. Field Supervisor



MATTHEW G. BEVIN GOVERNOR

TOURISM, ARTS AND HERITAGE CABINET KENTUCKY HERITAGE COUNCIL

REGINA STIVERS
DEPUTY SECRETARY

DON PARKINSON SECRETARY THE STATE HISTORIC PRESERVATION OFFICE
300 WASHINGTON STREET
FRANKFORT, KENTUCKY 40601
PHONE (502) 564-7005
FAX (502) 564-5820
www.heritage.ky.gov

CRAIG A. POTTS
EXECUTIVE DIRECTOR
& STATE HISTORIC
PRESERVATION OFFICER

November 14, 2016

Mr. David M. Waldner, P.E. Director, Division of Environmental Analysis Kentucky Transportation Cabinet 200 Mero Street Frankfort, KY 40622

Re: An Archaeological Survey of New Right-of-Way for the Proposed Widening of i-75 in Rockcastle County, Kentucky.

Report submitted by Alexandra Bybee of Cultural Resource Analysts, Inc. Report dated October 4, 2016.

KYTC Item Number 8-6.3

Dear Mr. Waldner:

Thank you for the letter regarding the above referenced project report, received November 9, 2016. The letter describes the intensive pedestrian survey, supplemented by screened shovel testing, of five parcels to be acquired as new right-of-way along Interstate 75 in Rockcastle County, Kentucky. As a result of the survey, the investigators defined one new prehistoric archaeological site, 15Rk104. This site consists of a low density of lithic material, no temporally diagnostic material, and no evidence of intact cultural features below the plowzone. The investigators recommended that this site was not eligible for listing on the National Register of Historic Places, and recommended no additional work within the project area. After review of this report, staff with the KYTC concurred with the investigator's recommendations. The Kentucky Heritage Council also concurs with the investigator's and KYTC's recommendations concerning archaeological cultural resources within the proposed project area.

If the project design or boundaries change, this office should be consulted to determine the nature and extent of additional documentation that may be needed. In the event of the unanticipated discovery of an archaeological site or object of antiquity, the discovery should be reported to the Kentucky Heritage Council and to the Kentucky Office of State Archaeology in the Anthropology Department at the University of Kentucky in accordance with KRS 164.730. In the event that human remains are encountered during project activities, all work should be immediately stopped in the area and the area cordoned off, and in accordance with KRS 72.020 the county coroner and local law enforcement must be contacted immediately. Upon confirmation that the human remains are not of forensic interest, the unanticipated discovery must be reported to the Kentucky Heritage Council.

Should you have any questions, feel free to contact Chris Gunn of my staff at (502) 564-7005, extension 118.

Sincerely,

Craig A. Potts, Executive Director and

State Historic Preservation Officer

CP: KHC # 47952

cc: George Crothers (OSA); Charles Niquette (CRAI)

#Preservation50: Commemorating the 50th anniversary of the National Historic Preservation Act and the Kentucky Heritage Council 1966-2016





Kentucky Transportation Cabinet

Highway District 8

And

_____(2), Construction

Kentucky Pollutant Discharge Elimination System
Permit KYR10
Best Management Practices (BMP) Plan
Groundwater Protection Plan
For Highway Construction Activities

For

I-75 Widening in

Rockcastle County

Contract ID ###### (2)

Six Year Plan Item 8-6.3

Page 1 of 12

Project Information

Note — (1) = Design (2) = Construction (3) = Contractor

- 1. Owner Kentucky Transportation Cabinet, District 8
- 2. Resident Engineer: (2)
- 3. Contractor Name: (2)

Address: (2)

Phone number: (2)

Contact: (2)

Contractor's agent responsible for compliance with the KPDES

permit requirements: (3)

- 4. Contract ID Number: (2)
- 5. Route (Address): I-75, Rockcastle County, KY
- 6. Latitude/Longitude (project mid-point)

- 7. County (project mid-point): Rockcastle County
- 8. Project start date (date work will begin): (2)
- 9. Projected completion date: (2)

1.0 SITE DESCRIPTION.

- 1) Nature of construction activity (from letting project description). Major widening of I-75 to 6 lanes from Mile point 60.1 64.5 in Rockcastle County.
- 2) Order of major soil disturbing activities. (2) and (3)
- 3) Projected volume of material to be moved. Approximately 800,000 yards.
- 4) Estimate of total project area (acres). 136 acres.
- 5) Estimate of area to be disturbed (acres). 116.3 acres
- 6) Post construction runoff coefficient will be included in the project drainage folder. Persons needing information pertaining to the runoff coefficient will contact the resident engineer to request this information.
- 7) Data describing existing soil condition. According to the US Agriculture Soil Survey for this area, the soils include the Frederick Silt Loam, Caneyville-Hagerstown Silt Loam, the Brookside-Faywood outcrop complex and the Caneyville-Shelocta Silt Loam.
- 8) Data describing existing discharge water quality (if any). Existing discharge is in the form of point discharges with little to no BMPs associated with them.
- **9) Receiving water name.** Renfro Creek and several unnamed tributaries to Roundstone Creek.
- **10) TMDLs and Pollutants of Concern in Receiving Waters.** There are no TMDLs on Renfro Creek or Roundstone Creek. However, Roundstone Creek is an outstanding resource water.
- 11) Site Map. Project layout sheet plus the erosion control sheets in the project plans that depict Disturbed Drainage Areas (DDAs) and related information. These sheets depict the existing project conditions with areas delineated by DDA (drainage area bounded by watershed breaks and right of way limits), the storm water discharge locations (either as a point discharge or as overland flow) and the areas that drain to each discharge point. These plans define the limits of areas to be disturbed and the location of control measures. Controls will be either site specific as designated by the designer or will be annotated by the contractor and resident engineer before disturbance commences. The project layout sheet shows the surface waters and wetlands.
- 12) Potential sources of pollutants. The primary source of pollutants is solids that are mobilized during storm events. Other sources of pollutants include oil/fuel/grease from servicing and operating construction equipment, concrete washout water, sanitary wastes and trash/debris. (3)

2.0 SEDIMENT AND EROSION CONTROL MEASURES.

2.1 Erosion Control Sheets. Plans for highway construction projects will include erosion control sheets that depict Disturbed Drainage Areas (DDAs) and related information. These plan sheets will show the existing project conditions with areas delineated by DDA within the right of way limits, the discharge points and the areas that drain to each discharge point.

Project managers and designers will analyze the DDAs and identify Best Management Practices (BMPs) that are site specific. The balance of the BMPs for the project will be listed in the bid documents for selection and use by the contractor on the project with approval by the resident engineer.

Projects that do not have DDAs annotated on the erosion control sheets will employ the same concepts for development and managing BMP plans.

The following non-structural BMPs will be implemented throughout the project duration:

- > Sediment control BMPs will be maintained when the sediment reaches 1/3 the depth of the BMP.
- > Appropriate stock of straw erosion control blanket (ECB) and straw bales shall be available onsite at all times.
- > Straw ECB or seeding mulched with blown straw followed by crimping shall be applied within 7 days of the cessation of the land disturbing activity. If blown straw is used, the blower and crimping equipment shall be kept onsite during land disturbing activities.
- > Disturbed areas shall be stabilized prior to a forecasted rain event.
- > EPSC/SWPPP inspections shall be performed at least twice a week.
- 2.2 Annotations. Following award of the contract, the contractor and resident engineer will annotate the erosion control sheets showing location and type of BMPs for each of the DDAs that will be disturbed at the outset of the project. This annotation will be accompanied by an order of work that reflects the order or sequence of major soil moving activities. The remaining DDAs are to be designated as "Do Not Disturb" until the contractor and resident engineer prepare the plan for BMPs to be employed. The initial BMPs shall be for the first phase (generally Clearing and Grubbing) and shall be modified as needed as the project changes phases. The BMP Plan will be modified to reflect disturbance in additional DDA's as the work progresses. All DDA's will have adequate BMPs in place before being disturbed.
- **2.3 Disturbed Drainage Areas.** As DDAs are prepared for construction, the following will be addressed for the project as a whole or for each DDA as appropriate:
 - **A)** Construction Access. This is the first land-disturbing activity. As soon as construction begins, bare areas will be stabilized with straw ECB or straw followed by crimping and designated construction entrances will be installed.
 - **B)** Sources. At the beginning of the project, all DDAs for the project will be inspected for areas that are a source of storm water pollutants. Areas that are a source of pollutants will receive appropriate cover or BMPs to arrest the introduction of pollutants into storm water. Areas that have not been opened by the contractor will be inspected periodically (once per month) to determine if there is a need to employ BMPs to keep pollutants from entering storm water.
 - **C)** Clearing and Grubbing. The following BMPs will be considered and used where appropriate.
 - 1) Leaving areas undisturbed when possible.
 - 2) Silt Basins to provide silt volume for large areas.
 - 2) Silt Traps Type A for small areas.
 - 3) Silt Traps Type C in front of existing and drop inlets which are to be saved.
 - 4) Diversion ditches to catch sheet runoff and carry it to basins or traps or to divert it around areas to be disturbed.
 - 5) Brush and/or other barriers to slow and/or divert runoff.
 - 6) Silt fences to catch sheet runoff on short slopes. For longer slopes, multiple

- rows of silt fence may be considered.
- 7) Temporary Mulch for areas which are not feasible for the fore mentioned types of protections.
- 8) Non-standard or innovative methods.
- 9) Spill Containment Areas to protect sinkholes and outfalls.
- D) Cut and FM and Placement of Drainage Structures. The BMP Plan will be modified to show additional BMPs such as:
 - 1) Silt Traps Type B in ditches and/or drainways as they are completed.
 - 2) Silt Traps Type C in front of pipes after they are placed.
 - 3) Channel Lining
 - 4) Erosion Control Blanket
 - 5) ECB and/or straw, seeding and crimping for areas where construction activities will be ceased for seven days or more.
 - 6) Non-standard or innovative methods.
- **E) Profile and X-Section in Place.** The BMP Plan will be modified to show elimination of BMPs which had to be removed and the addition of new BMPs as the roadway was shaped. Probably changes include:
 - 1) Silt Trap Type A, Brush and/or other barriers, Temporary Mulch, and any other BMP which had to be removed for final grading to take place.
 - 2) Additional Silt Traps Type B and Type C to be placed as final drainage patterns are put in place.
 - 3) Additional Channel Lining and/or Erosion Control Blanket and/or Turf Reinforcement Mats.
 - 4) Temporary Mulch and/or seeding for areas where construction activities will be ceased for seven days or more.
- F) Finish Work (Paving, Seeding, Protect, etc.). A final BMP Plan will result from modifications during this phase of construction. Probable changes include:
 - Removal of Silt Traps Type B from ditches and drainways if they are protected with other BMPs which are sufficient to control erosion, i.e. Erosion Control Blanket, Turf Reinforcement Mats or Permanent Seeding and Protection on moderate grades.
 - 2) Permanent Seeding and Protection.
 - 3) Placing Sod.
- **G) Post Construction.** BMPs, including Karst policy BMPs, to be installed during construction to control the pollutants in stormwater discharges that will occur after construction has been completed are:
 - Filter ditches: Filter ditches are grass swales placed at the outlets of some of the spill containment areas to promote infiltration and vegetative filtering.
 - Spill containment areas: Detention/containment basins for capturing accidental spills on the newly constructed roadway will be provided in accordance with KYTC's Design Policy.

KYTC BMP Plan for Contract ID ###### 3.0 OTHER CONTROL MEASURES.

- 1) Solid Materials. No solid materials, including building materials, shall be discharged to waters of the commonwealth, except as authorized by a Section 404 permit.
- 2) Waste Materials. All waste materials that may leach pollutants (paint and paint containers, caulk tubes, oil/grease containers, liquids of any kind, soluble materials, etc.) will be collected and stored in appropriate covered waste containers. Waste containers shall be removed from the project site on a sufficiently frequent basis as to not allow wastes to become a source of pollution. All personnel will be instructed regarding the correct procedure for waste disposal. Wastes will be disposed in accordance with appropriate regulations. Notices stating these practices will be posted in the office.
- 3) Hazardous Waste. All hazardous waste materials will be managed and disposed of in the manner specified by local or state regulation. The contractor shall notify the Resident Engineer if there are any hazardous wastes being generated at the project site and how these wastes are being managed. Site personnel will be instructed with regard to proper storage and handling of hazardous wastes when required. The Transportation Cabinet will file for generator, registration when appropriate, with the Division of Waste Management and advise the contractor regarding waste management requirements.
- 4) Spill Prevention. The following material management practices will be used to reduce the risk of spills or other exposure of materials and substances to the weather and/or runoff. (3)
- **3.1 Good Housekeeping.** The following good housekeeping practices will be followed onsite during the construction project.
 - 1) An effort will be made to store only enough product required to do the job.
 - 2) All materials stored onsite will be stored in a neat, orderly manner in their appropriate containers and, if possible, under a roof or other enclosure.
 - 3) Products will be kept in their original containers with the original manufacturer's label.
 - 4) Substances will not be mixed with one another unless recommended by the manufacturer.
 - 5) Whenever possible, all of the product will be used up before disposing of the container.
 - 6) Manufacturers' recommendations for proper use and disposal will be followed
 - 7) The site contractor will inspect daily to ensure proper use and disposal of materials onsite.
- **3.2 Hazardous Products.** These practices will be used to reduce the risks associated with any and all hazardous materials.
 - 1) Products will be kept in original containers unless they are not re-sealable.
 - 2) Original labels and material safety data sheets (MSDS) will be reviewed and retained.
 - 3) Contractor will follow procedures recommended by the manufacturer when handling hazardous materials.
 - 4) If surplus product must be disposed of, manufacturers' or state/local

recommended methods for proper disposal will be followed.

3.3 The following product-specific practices will be followed onsite:

A) Petroleum Products. Vehicles and equipment that are fueled and maintained on site will be monitored for leaks, and receive regular preventative maintenance to reduce the chance of leakage. Petroleum products onsite will be stored in tightly sealed containers, which are clearly labeled and will be protected from exposure to weather.

The contractor shall prepare an Oil Pollution Spill Prevention Control and Countermeasure plan when the project that involves the storage of petroleum products in 55 gallon or larger containers with a total combined storage capacity of 1,320 gallons. This is a requirement of 40 CFR 112.

This project (will / will not) (3) have over 1,320 gallons of petroleum products with a total capacity, sum of all containers 55 gallon capacity and larger.

- **B)** Fertilizers. Fertilizers will be applied at rates prescribed by the contract, standard specifications or as directed by the resident engineer. Once applied, fertilizer will be covered with mulch or blankets or worked into the soil to limit exposure to storm water. Storage will be in a covered shed. The contents of any partially used bags of fertilizer will be transferred to a sealable plastic bin to avoid spills.
- **C) Paints.** All containers will be tightly sealed and stored indoors or under roof when not being used. Excess paint or paint wash water will not be discharged to the drainage or storm sewer system but will be properly disposed of according to manufacturers' instructions or state and local regulations.
- D) Concrete Truck Washout. Concrete truck mixers and chutes will not be washed on pavement, near storm drain inlets, or within 75 feet of any ditch, stream, wetland, lake, or sinkhole. Where possible, excess concrete and wash water will be discharged to areas prepared for pouring new concrete, flat areas to be paved that are away from ditches or drainage system features, or other locations that will not drain off site. Where this approach is not possible, a shallow earthen wash basin will be excavated away from ditches to receive the wash water.
- E) Spill Control Practices. In addition to the good housekeeping and material management practices discussed in the previous sections of this plan, the following practices will be followed for spill prevention and cleanup:
 - 1) Manufacturers' recommended methods for spill cleanup will be clearly posted. All personnel will be made aware of procedures and the location of the information and cleanup supplies.
 - 2) Materials and equipment necessary for spill cleanup will be kept in the material storage area. Equipment and materials will include as appropriate, brooms, dust pans, mops, rags, gloves, oil absorbents, sand, sawdust, and plastic and metal trash containers.
 - 3) All spills will be cleaned up immediately after discovery.
 - 4) The spill area will be kept well ventilated and personnel will wear appropriate protective clothing to prevent injury from contract with a hazardous substance.
 - 5) Spills of toxic or hazardous material will be reported to the appropriate state/local agency as required by KRS 224 and applicable federal law.

- 6) The spill prevention plan will be adjusted as needed to prevent spills from reoccurring and improve spill response and cleanup.
- 7) Spills of products will be cleaned up promptly. Wastes from spill clean-up will be disposed in accordance with appropriate regulations. Spills will be addressed in the "dry", and will not be "washed away" to clean.
- 4.0 OTHER STATE AND LOCAL PLANS. This BMP plan shall include any requirements specified in sediment and erosion control plans, storm water management plans or permits that have been approved by other state or local officials. Upon submittal of the NOI, other requirements for surface water protection are incorporated by reference into and are enforceable under this permit (even if they are not specifically included in this BMP plan). This provision does not apply to master or comprehensive plans, non-enforceable guidelines or technical guidance documents that are not identified in a specific plan or permit issued for the construction site by state or local officials. (1)
- **5.0 MAINTENANCE.** The BMP plan shall include a clear description of the maintenance procedures necessary to keep the control measures in good and effective operating condition.

Maintenance of BMPs during construction shall be a result of twice a week and post rain event inspections with action being taken by the contractor to correct deficiencies within three working days.

Post Construction maintenance will be a function of normal highway maintenance operations. Following final project acceptance by the cabinet, district highway crews will be responsible for identification and correction of deficiencies regarding ground cover and cleaning of storm water BMPs. Post-construction BMP maintenance will be covered in the cabinets MS4 permit under MCM 5 activities.

- **6.0 INSPECTIONS.** Inspection and maintenance practices that will be used to maintain erosion and sediment controls:
 - 1) All erosion prevention and sediment control measures will be inspected by the Contractor at least twice each week.
 - 2) Inspections will be conducted by individuals that have received Kentucky Erosion Prevention and Sediment Control Roadway Inspector (KEPSC-RI) training or other qualification as prescribed by the Cabinet that includes instruction concerning erosion prevention and sediment control.
 - 3) Inspection reports will be written, signed, dated, and kept on file.
 - 4) Stabilization of disturbed areas shall be performed within 7 days of the cessation of the land disturbing activity.
 - 5) Disturbed areas shall be stabilized prior to a forecasted rain event.
 - 6) Sediment control BMPs will be maintained when the sediment reaches 1/3 the depth of the BMP.
 - 7) All measures will be maintained in good working order. If a repair is necessary, it will be initiated within 24 hours of being reported and completed within three working days.
 - 8) Silt fences will be inspected for bypassing, overtopping, undercutting, depth of sediment, tears, and to ensure attachment to secure posts.
 - 9) Diversion dikes and berms will be inspected and any breaches promptly repaired. Areas that are eroding or scouring will be repaired and re-seeded /

mulched as needed.

- 10) Temporary and permanent seeding and mulching will be inspected for bare spots, washouts, and healthy growth. Bare or eroded areas will be repaired as needed.
- 11) All material storage and equipment servicing areas that involve the management of bulk liquids, fuels, and bulk solids will be inspected weekly for conditions that represent a release or possible release of pollutants to the environment.
- **7.0 NON-STORM WATER DISCHARGES.** It is expected that non-storm water discharges may occur from the site during the construction period. Examples of non-storm water discharges include:
 - 1) Water from water line flushings.
 - 2) Water form cleaning concrete trucks and equipment.
 - 3) Pavement wash waters (where no spills or leaks of toxic or hazardous materials have occurred).
 - 4) Uncontaminated groundwater and rain water (from dewatering during excavation).

All non-storm water discharges will be directed to the sediment basin or to a filter fence enclosure in a flat vegetated infiltration area or be filtered via another approved commercial product.

8.0 GROUNDWATER PROTECTION PLAN.

This plan serves as the groundwater protection plan as required by 401 KAR 5:037.

Contractor's statement: (3)

The following activities, as enumerated by 401 KAR 5:037 Section 2, require the preparation and implementation of a groundwater protection plan, and will or may be conducted as part of this construction project: (2)

- ____ (a) Land treatment or land disposal of a pollutant;
- _ (b) Storing, treating, disposing, or related handling of hazardous waste, solid waste or

special waste, or special waste in landfills, incinerators, surface impoundments, tanks, drums, or other containers, or in piles, (This does not include wastes managed in a container placed for collection and removal of municipal solid waste for disposal off site);

- (c) Handling of materials in bulk quantities (equal or greater than 55 gallons or 100 pounds net dry weight transported held in an individual container) that, if released to the environment, would be a pollutant;
- (d) Storing or related handling of road oils, dust suppressants, or deicing agents at a central location;

	KYTC BMP Plan for	Contract II)
(a) Application	or related handling of	road oils	duct cun

_____ (e) Application or related handling of road oils, dust suppressants or deicing materials,

(does not include use of chloride-based deicing materials applied to roads or parking lots);

(f) Installation, construction, operation, or abandonment of wells, bore holes, or core holes, (this does not include bore holes for the purpose of explosive demolition);

Or, check the following only if there are no qualifying activities

____ There are no activities for this project as listed in 401 KAR 5:037 Section 2 that require

the preparation and implementation of a groundwater protection plan.

The contractor is responsible for the preparation of a plan that addresses the 401 KAR 5:037 Section 3. (3)

Elements of site specific groundwater protection plan:

- (a) General information about this project is covered in the Project information;
- (b) Activities that require a groundwater protection plan have been identified above;
- (c) Practices that will protect groundwater from pollution are addressed in Section 3. Other Control Measures.
- (d) Implementation schedule all practices required to prevent pollution of groundwater are to be in place prior to conducting the activity;
- (e) Training is required as a part of the ground water protection plan. All employees of the contractor, sub-contractor and resident engineer personnel will be trained to understand the nature and requirements of this plan as they pertain to their job function(s). Training will be accomplished within one week of employment and annually thereafter. A record of training will be maintained by the contractor with a copy provide to the resident engineer.
- (f) Groundwater plan activities will be inspected during the EPSC inspections
- (g) Certification (see signature page.)

KYTC BMP Plan for Contract ID ##### Contractor and Resident Engineer Plan Certification

The contractor that is responsible for implementing this BMP plan is identified in the Project Information section of this plan.

The following certification applies to all parties that are signatory to this BMP plan:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. Further, this plan complies with the requirements of 401 KAR 5:037. By this certification, the undersigned state that the individuals signing the plan have reviewed the terms of the plan and will implement its provisions as they pertain to ground water protection.

Contractor and Resident Engineer Certification:

(3) Signed	title					
	typed or printed name'		signature			
(2)						
Signed		title				
	typed or printed name ²		sionature			

- 1. Contractors Note: to be signed by a person who is the owner, a responsible corporate officer, a general partner or the proprietor or a person designated to have the authority to sign reports by such a person in accordance with 401 KAR 5: 060 Section 9. This delegation shall be in writing to: Manager, KPDES Branch, Division of Water, 200 Fair Oaks Lane, Fourth Floor, Frankfort, Kentucky 40601. Reference the Contract ID number and KPDES number when one has been issued.
- 2. KYTC Note: to be signed by the Chief District Engineer or a person designated to have the authority to sign reports by such a person (usually the resident engineer) in accordance with 401 KAR 5:060 Section 9. This delegation shall be in writing to: Manager, KPDES Branch, Division of Water, 300 Sower Blvd, Frankfort, Kentucky 40601 Reference the Contract ID number and KPDES number when one has been issued.

Sub-Contractor Certification

The following sub-contractor shall be made aware of the BMP plan and responsible for implementation of BMPs identified in this plan as follows:

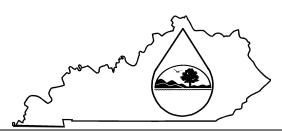
Subcon	tractor Name:			
	Address:			
	Phone:			
The part	t of BMP plan this sub	contractor is respon	sible to implement is:	
Discharg been dev	ge Elimination System veloped to manage the struction site activity an	permit that authorize quality of water to b	erms and conditions of the g zes the storm water discharge e discharged as a result of st on-storm water pollutant so	ges, the BMP plan that has orm events associated with
Signed				
	printed name ¹	typed title	signatu	or re

1. Sub Contractor Note: To be signed by a person who is the owner, a responsible corporate officer, a general partner or the proprietor or a person designated to have the authority to sign reports by such a person in accordance with 401 KAR 5:060 Section 9. This delegation shall be in writing to: Manager, KPDES Branch, Division of Water, 300 Sower Blvd., Frankfort, Kentucky 40601. Reference the Contract ID number and KPDES number when one has been issued.

Signature:

Contract ID: 161270 Page 81 of 172

KPDES FORM NOI-SW



Kentucky Pollutant Discharge Elimination System (KPDES)

Notice of Intent (NOI) for Storm Water Discharges Associated with Industrial Activity Under the **KPDES General Permit**

Submission of this Notice of Intent constitutes notice that the party identified in Section I of this form intends to be authorized by a KPDES permit issued for storm water discharges associated with industrial activity. Becoming a permittee obligates such

ALL N			rms and condi NFORMATI			OVIDEI	ON '	THIS I	FORM	I (See	Instru	ctions on	back)
I. Facility Operat													ŕ
Name:	KYTC District 8					Pho			606	677401	17		
Address:	1660 S HWAY 27						us of ner/Op	eratoi	r :	F			
City, State, Zip Code: Somerset. KY 42501													
II. Facility/Site I	Location	n Info	rmation										
Name:	PCN #	PCN ##-###, for SYP 08-6.3											
Address:	I-75	I											
City, State, Zip C	Code:	Rock	castle Co.										
County:	Rockc	astle											
Site Latitude: (degrees/minutes			37-26-39 N			Site Lo			conds	6	84-20	-18 W	
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Are there existing	g quant	itative	e data?	Yes ☐ No ⊠	If Yes, su	ıbmit w	ith thi	s form	•			1	
SIC or Designate			•	1611	2nd	1622	4:	3rd				4 th	
If this facility is a If you have other				·			<u>cauon</u>	Numb	er:				
IV. Additional In		_					TTIES	SONL	V				
Project Start Dat		1011 140	quireu i oic	COMBIN	0011011			Date:					
Estimated Area t		sturbe	d (in acres):			136							
Is the Storm Wat						Yes [abla	Na 🗆					
with State and/or V. Certification								No	were i	nrenar	ed unde	er my dire	ection or
supervision in													
information s													
responsible fo													
and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.													
Printed or Typed	Printed or Typed Name: Patty Dunaway SHE												
Signature:						Date:							

Kentucky Pollutant Discharge Elimination System (KPDES) Instructions

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Notice of Intent (NOI) for Storm Water Discharges Associated with Industrial Activity To Be Covered Under The KPDES General Permit

WHO MUST FILE A NOTICE OF INTENT (NOI) FORM

Federal law at 40 CFR Part 122 prohibits point source discharges of stormwater associated with industrial activity to a water body of the Commonwealth of Kentucky without a Kentucky Pollutant Discharge Elimination System (KPDES) permit. The operator of an industrial activity that has such a storm water discharge must submit a NOI to obtain coverage under the KPDES Storm Water General Permit. If you have questions about whether you need a permit under the KPDES Storm Water program, or if you need information as to whether a particular program is administered by the state agency, call the Storm Water Contact, Industrial Section, Kentucky Division of Water at (502) 564-3410.

WHERE TO FILE NOI FORM

NOIs must be sent to the following address:

Section Supervisor Inventory & Data Management Section KPDES Branch, Division of Water Frankfort Office Park 14 Reilly Road Frankfort, KY 40601

COMPLETING THE FORM

Type or print legibly in the appropriate areas only. If you have any questions regarding the completion of this form call the Storm Water Contact, Industrial Section, at (502) 564-3410.

SECTION I - FACILITY OPERATOR INFORMATION

Give the legal name of the person, firm, public organization, or any other entity that operates the facility or site described in this application. The name of the operator may or may not be the same as the name of the facility. The responsible party is the legal entity that controls the facility's operation, rather than the plant or site manager. Do not use a colloquial name. Enter the complete address and telephone number of the operator.

Enter the appropriate letter to indicate the legal status of the operator of the facility.

M = Public (other than federal or state) F = Federal

S = State P = Private

SECTION II - FACILITY/SITE LOCATION INFORMATION

Enter the facility's or site's official or legal name and complete street address, including city, state, and ZIP code.

SECTION III - SITE ACTIVITY INFORMATION

If the storm water discharges to a municipal separate storm sewer system (MS4), enter the name of the operator of the MS4 (e.g., municipality name, county name) and the receiving water of the discharge from the MS4. (A MS4 is defined as a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains) that is owned or operated by a state, city, town, borough, county, parish, district, association, or other public body which is designed or used for collecting or conveying storm water.)

If the facility discharges storm water directly to receiving water(s), enter the name of the receiving water.

Indicate whether or not the owner or operator of the facility has existing quantitative data that represent the characteristics and concentration of pollutants in storm water discharges. If data is available submit with this form.

List, in descending order of significance, up to four 4-digit standard industrial classification (SIC) codes that best describe the principal products or services provided at the facility or site identified in Section II of this application.

If the facility listed in Section II has participated in Part 1 of an approved storm water group application and a group number has been assigned, enter the group application number in the space provided.

If there are other KPDES permits presently issued for the facility or site listed in Section II, list the permit numbers.

SECTION IV - ADDITIONAL INFORMATION REQUIRED FOR CONSTRUCTION ACTIVITIES ONLY

Construction activities must complete Section IV in addition of Sections I through III. Only construction activities need to complete Section IV.

Enter the project start date and the estimated completion date for the entire development plan.

Provide an estimate of the total number of acres of the site on which soil will be disturbed (round to the nearest acre).

Indicate whether the storm water pollution prevention plan for the site is in compliance with approved state and/or local sediment and erosion plans, permits, or storm water management plans.

SECTION V - CERTIFICATION

Federal statutes provide for severe penalties for submitting false information on this application form. Federal regulations require this application to be signed as follows:

For a corporation: by a responsible corporate officer, which means: (i) president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions, or (ii) the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25 million (in second-quarter 1980 dollars), if authroity to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

For a partnership or sole proprietorship: by a general partner or the proprietor; or

For a municipality, state, Federal, or other public facility: by either a principal executive officer or ranking elected official.

PART II

SPECIFICATIONS AND STANDARD DRAWINGS

SPECIFICATIONS REFERENCE

Any reference in the plans or proposal to previous editions of the *Standard Specifications* for Road and Bridge Construction and Standard Drawings are superseded by Standard Specifications for Road and Bridge Construction, Edition of 2012 and Standard Drawings, Edition of 2016.

Subsection	101.03 DEFINITIONS
Revision:	Add the following Definitions to this section:
Kevision.	Superpave Mix Design Technologist (SMDT) - An inspector qualified by the KYTC to
	submit, adjust, or approve asphalt mix designs.
	submit, adjust, of approve asphalt mix designs.
	Superpave Plant Technologist (SPT) - An inspector qualified by the KYTC to perform
	routine inspection and process control, acceptance, or verification testing on asphalt mixtures.
Subsections	102.15 Process Agent.
Revision:	Replace the 1st paragraph with the following:
Kevision.	Every corporation doing business with the Department shall submit evidence of compliance
	with KRS Sections 14A.4-010, 271B.11-010, 271B.11-070, 271B.11-080, 271B.5-010 and
	271B.16-220, and file with the Department the name and address of the process agent upon
	whom process may be served.
Subsection	105.13 Claims Resolution Process.
Revision:	Delete all references to TC 63-34 and TC 63-44 from the subsection as these forms are no
Ke vision.	longer available through the forms library and are forms generated within the AASHTO
	SiteManager software.
Subsection:	108.01 Subcontracting of Contract.
Revision:	Replace the section with the following:
	Do not subcontract, sell, transfer, assign, or otherwise dispose of the Contract or any portion of
	the Contract or Contracts, or of the right, title, or interest therein, without the Engineer's
	written consent. If the Contractor chooses to subcontract any portion of the Contract, a written
	request to sublet work must be submitted on the Subcontract Request (TC 63-35) form for the
	Engineer's approval. When directed by the Engineer, submit a certified copy of the actual
	subcontract agreement executed between the parties.
	•
	The Engineer will allow the Contractor to subcontract a portion, but the Contractor must
	perform with his own organization work amounting to no less than 30 percent of the total
	Contract cost. The Engineer will not allow any subcontractor to exceed the percentage to be
	performed by the Contractor and will require the Contractor to maintain a supervisory role over the entire project.
	the entire project.
	Do not allow any subcontractor to further subcontract any portion of the work without
	obtaining written consent from the Engineer. When the Engineer gives such consent, the first
	tier subcontractor may further subcontract a portion of his work not to exceed 50 percent of the
	work originally subcontracted to him by the Contractor. Do not allow any second tier
	subcontractor to subcontract any portion of the work.
	Extra work performed by subcontractors in accordance with Section 109 will not be utilized in
	the computation of total dollar amount subcontracted. Subcontract percentages are based upon
	the original contract amount.
	Payment to subcontractors for satisfactory performance of their work or materials supplied must
	be made within 7 calendar days from receipt of payment from the Engineer. Upon request by
	the Engineer, provide proof that payment has been made to the subcontractor within the 7
	calendar days. Progress payments may be withheld for failure to comply with this request

The Engineer's written consent to subcontract, assign, or otherwise dispose of any portion of the Contract does not, under any circumstances, relieve the Contractor or the surety of their respective liabilities and obligations under the Contract. The Engineer will make transactions only with the Contractor. The Engineer will recognize subcontractors only in the similar capacity of employees or workers of the Contractor who are subject to the same requirements as to character and competence as specified in Subsection 108.06.

Lease agreements are acceptable on Department projects. No additional paperwork is needed when equipment is rented from a commercial rental company unless the leased equipment comes with an operator. In these circumstances, payroll records for the operator of the leased equipment must be maintained and submitted by the contractor in accordance with Department policy.

Lease agreements between contractors that involve equipment only will require the submittal of a TC 63-71 Department Equipment Rental Form. If a Contractor is found to be in violation of these requirements, the Engineer reserves the right to withhold payment for the work which was performed in violation of these requirements. This provision does not include the lease or use of equipment from a corporation or company wholly owned by the Contractor. The Contractor shall not use equipment in the performance of the Contract to which title is not held by the Contractor or an approved subcontractor without a submitted lease agreement.

If a public official has provided a documented Declaration of Emergency, then the Engineer may verbally waive the requirement of submitting a TC 63-71 Department Equipment Rental Form until the situation has ended. After the emergency situation ends, immediately remove the equipment from the project or submit a completed TC 63-71 Department Equipment Rental Form to the Engineer.

108.03 Preconstruction Conference.

Revision:

Replace 8) Staking with the following:

8) Staking (designated by a Professional Engineer or Land Surveyor licensed in the Commonwealth of Kentucky.

Subsection:

109.07.02 Fuel.

Revision:

Revise item Crushed Aggregate Used for Embankment Stabilization to the following:

Crushed Aggregate

Used for Stabilization of Unsuitable Materials

Used for Embankment Stabilization

Delete the following item from the table.

Crushed Sandstone Base (Cement Treated)

Subsection:

110.02 Demobilization

Revision:

Replace the first part of the first sentence of the second paragraph with the following:

Perform all work and operations necessary to accomplish final clean-up as specified in the first paragraph of Subsection 105.12;

Subsection: 112.

112.03.12 Project Traffic Coordinator (PTC).

Revision:

Replace the last paragraph of this subsection with the following:

Ensure the designated PTC has sufficient skill and experience to properly perform the task assigned and has successfully completed the qualification courses.

Subsection:	112.04.18 Diversions (By-Pass Detours).
Revision:	Insert the following sentence after the 2nd sentence of this subsection.
	The Department will not measure temporary drainage structures for payment when the contract
	documents provide the required drainage opening that must be maintained with the diversion.
	The temporary drainage structures shall be incidental to the construction of the diversion. If the
	contract documents fail to provide the required drainage opening needed for the diversion, the
	cost of the temporary drainage structure will be handled as extra work in accordance with
	section 109.04.
Subsection:	201.03.01 Contractor Staking.
Revision:	Replace the first paragraph with the following: Perform all necessary surveying under the
	general supervision of a Professional Engineer or Land Surveyor licensed in the
	Commonwealth of Kentucky.
	201.04.01 Contractor Staking.
Revision:	Replace the last sentence of the paragraph with the following: Complete the general layout of
	the project under the supervision of a Professional Engineer or Land Surveyor licensed in the
	Commonwealth of Kentucky.
	206.04.01 Embankment-in-Place.
Revision:	Replace the fourth paragraph with the following: The Department will not measure suitable
	excavation included in the original plans that is disposed of for payment and will consider it
G 1 4°	incidental to Embankment-in-Place.
	208.02.01 Cement.
Revision:	Replace paragraph with the following: Select Type Lear Type II coment conforming to Section 801. Use the same type coment
	Select Type I or Type II cement conforming to Section 801. Use the same type cement throughout the work.
Subsections	208.03.06 Curing and Protection.
Revision:	Replace the fourth paragraph with the following:
Kevision.	Do not allow traffic or equipment on the finished surface until the stabilized subgrade has
	cured for a total of 7-days with an ambient air temperature above 40 degrees Fahrenheit. A
	curing day consists of a continuous 24-hour period in which the ambient air temperature does
	not fall below 40 degrees Fahrenheit. Curing days will not be calculated consecutively, but
	must total seven (7), 24-hour days with the ambient air temperature remaining at or above 40
	degrees Fahrenheit before traffic or equipment will be allowed to traverse the stabilized
	subgrade. The Department may allow a shortened curing period when the Contractor requests.
	The Contractor shall give the Department at least 3 day notice of the request for a shortened
	curing period. The Department will require a minimum of 3 curing days after final compaction.
	The Contractor shall furnish cores to the treated depth of the roadbed at 500 feet intervals for
	each lane when a shortened curing time is requested. The Department will test cores using an
	unconfined compression test. Roadbed cores must achieve a minimum strength requirement of
	80 psi.
Subsection:	208.03.06 Curing and Protection.
Revision:	Replace paragraph eight with the following:
	At no expense to the Department, repair any damage to the subgrade caused by freezing.

	Effective with the April 29, 2016 Letting
Subsection:	212.03.03 Permanent Seeding and Protection.
Part:	A) Seed Mixtures for Permanent Seeding.
Revision:	Revise Seed Mix Type I to the mixture shown below:
	50% Kentucky 31 Tall Fescue (Festuca arundinacea)
	35% Hard Fescue (Festuca (Festuca longifolia)
	10% Ryegrass, Perennial (Lolium perenne)
	5% White Dutch Clover (Trifolium repens)
Subsection:	212.03.03 Permanent Seeding and Protection.
Part:	A) Seed Mixtures for Permanent Seeding.
Number:	2)
Revision:	Replace the paragraph with the following:
	Permanent Seeding on Slopes Greater than 3:1 in Highway Districts 4, 5, 6, and 7. Apply seed
	mix Type II at a minimum application rate of 100 pounds per acre. If adjacent to a golf course
	replace the crown vetch with Kentucky 31 Tall Fescue.
Subsection:	212.03.03 Permanent Seeding and Protection.
Part:	A) Seed Mixtures for Permanent Seeding.
Number:	3)
Revision:	Replace the paragraph with the following:
	Permanent Seeding on Slopes Greater than 3:1 in Highway Districts 1, 2, 3, 8, 9, 10, 11, and
	12. Apply seed mix Type III at a minimum application rate of 100 pounds per acre. If adjacent
	to crop land or golf course, replace the Sericea Lespedeza with Kentucky 31 Fescue.
Subsection:	212.03.03 Permanent Seeding and Protection.
Part:	B) Procedures for Permanent Seeding.
Revision:	Delete the first sentence of the section.
Subsection:	212.03.03 Permanent Seeding and Protection.
Part:	B) Procedures for Permanent Seeding.
Revision:	Replace the second and third sentence of the section with the following:
	Prepare a seedbed and apply an initial fertilizer that contains a minimum of 100 pounds of
	nitrogen, 100 pounds of phosphate, and 100 pounds of potash per acre. Apply agricultural
	limestone to the seedbed when the Engineer determines it is needed. When required, place
	agricultural limestone at a rate of 3 tons per acre.
	212.03.03 Permanent Seeding and Protection.
Part:	D) Top Dressing.
Revision:	Change the title of part to D) Fertilizer.
	212.03.03 Permanent Seeding and Protection.
Part:	D) Fertilizer.
Revision:	Replace the first paragraph with the following:
	Apply fertilizer at the beginning of the seeding operation and after vegetation is established.
	Use fertilizer delivered to the project in bags or bulk. Apply initial fertilizer to all areas prior to
	the seeding or sodding operation at the application rate specified in 212.03.03 B). Apply 20-10-
	10 fertilizer to the areas after vegetation has been established at a rate of 11.5 pounds per 1,000
	square feet. Obtain approval from the Engineer prior to the 2nd fertilizer application. Reapply
	fertilizer to any area that has a streaked appearance. The reapplication shall be at no additional
	cost to the Department. Re-establish any vegetation severely damaged or destroyed because of
Subsection:	an excessive application of fertilizer at no cost to the Department.
Part:	212.03.03 Permanent Seeding and Protection. D) Fertilizer.
Revision:	Delete the second paragraph.
Kevision:	Delete the second paragraph.

Subsections	212.04.04 Agricultural Limestone.						
Revision:	Replace the entire section with the following:						
Kevision.	The Department will measure the quantity of agricultural limestone in tons.						
Subsection:	212.04.05 Fertilizer.						
Revision:	Replace the entire section with the following:						
Kevision:	The Department will measure fertilizer used in the seeding or sodding operations for payment.						
	The Department will measure the quantity by tons.						
Subsection:	212.05 PAYMENT.						
Revision:	Delete the following item code:						
Kevision:	Code Pay Item Pay Unit						
	05966 Topdressing Fertilizer Ton						
Subsection:	212.05 PAYMENT.						
Revision:	Add the following pay items:						
Kevision.	Code Pay Item Pay Unit						
	05963 Initial Fertilizer Ton						
	05964 20-10-10 Fertilizer Ton						
	05992 Agricultural Limestone Ton						
Subsection:	213.03.02 Progress Requirements.						
Revision:							
	Replace the third paragraph with the following:						
	After exposing areas of erodible material, make every effort to stabilize and protect the areas as						
	quickly as possible. Permanently seed and mulch all areas at final grade within 14 days.						
	Temporary stabilization practices on those portions of the project where construction activities						
	have temporarily ceased shall be initiated within 14 days of the date of activity cessation. The						
	Engineer will suspend grading operations for instances where the Contractor fails to sustain						
	erosion control measures to effectively control erosion and to prevent water pollution in						
	accordance with the KPDES Permit. In addition, the Engineer will withhold monies due on						
	current estimates until corrective work has been initiated and is continuously progressing to						
	remediate noted deficiencies. Additionally, should noted deficiencies not be adequately						
	addressed to the satisfaction of the Engineer within 7 calendar days of receipt of written						
	notification of deficiencies, the Department will apply a penalty equal to the daily liquidated						
G 1 4	damages rate until all aspects of the work have been completed.						
	213.03.05 Temporary Control Measures.						
Part:	E) Temporary Seeding and Protection.						
Revision:	Delete the second sentence of the first paragraph. 304.02.01 Physical Properties.						
Subsection: Table:	· · · · · · · · · · · · · · · · · · ·						
Revision:	Required Geogrid Properties Replace all references to Test Method "GRI-GG2-87" with ASTM D 7737.						
Subsection:	402.03.02 Contractor Quality Control and Department Acceptance.						
Part:	B) Sampling.						
Revision:	Replace the second sentence with the following:						
IXC VISIUII.	The Department will determine when to obtain the quality control samples using the random-						
	number feature of the mix design submittal and approval spreadsheet. The Department will						
	randomly determine when to obtain the verification samples required in Subsections 402.03.03						
	and 402.03.04 using the Asphalt Mixture Sample Random Tonnage Generator.						
1							

Subsection: 402.03.02 Contractor Quality Control and Department Acceptance.

Part: D) Testing Responsibilities.

3) VMA. Number:

Revision: Add the following paragraph below Number 3) VMA:

> Retain the AV/VMA specimens and one additional corresponding G_{mm} sample for 5 working days for mixture verification testing by the Department. For Specialty Mixtures, retain a mixture sample for 5 working days for mixture verification testing by the Department. When the Department's test results do not verify that the Contractor's quality control test results are within the acceptable tolerances according to Subsection 402.03.03, retain the samples and

specimens from the affected sublot(s) for the duration of the project.

Subsection: 402.03.02 Contractor Quality Control and Department Acceptance.

D) Testing Responsibilities. Part:

4) Density. Number:

Revision: Replace the second sentence of the Option A paragraph with the following:

Perform coring by the end of the following work day.

Subsection: 402.03.02 Contractor Quality Control and Department Acceptance.

D) Testing Responsibilities. Part:

Number: 5) Gradation.

Revision: Delete the second paragraph.

Subsection: 402.03.02 Contractor Quality Control and Department Acceptance.

H) Unsatisfactory Work. Part: 1) Based on Lab Data. Number:

Replace the second paragraph with the following: **Revision:**

> When the Engineer determines that safety concerns or other considerations prohibit an immediate shutdown, continue work and the Department will make an evaluation of

acceptability according to Subsection 402.03.05.

402.03.03 Verification. **Subsection:**

Replace the first paragraph with the following: **Revision:**

> **402.03.03 Mixture Verification.** For volumetric properties, the Department will perform a minimum of one verification test for AC, AV, and VMA according to the corresponding procedures as given in Subsection 402.03.02. The Department will randomly determine when to obtain the verification sample using the Asphalt Mixture Sample Random Tonnage Generator. For specialty mixtures, the Department will perform one AC and one gradation determination per lot according to the corresponding procedures as given in Subsection 402.03.02. However, Department personnel will not perform AC determinations according to KM 64-405. The Contractor will obtain a quality control sample at the same time the Department obtains the mixture verification sample and perform testing according to the procedures given in Subsection 402.03.02. If the Contractor's quality control sample is verified by the Department's test results within the tolerances provided below, the Contractor's sample

will serve as the quality control sample for the affected sublot. The Department may perform the mixture verification test on the Contractor's equipment or on the Department's equipment.

Subsection: 402.03.03 Verification.

A) Evaluation of Sublot(s) Verified by Department. Part:

Revision: Replace the third sentence of the second paragraph with the following:

> When the paired t-test indicates that the Contractor's data and Department's data are possibly not from the same population, the Department will investigate the cause for the difference according to Subsection 402.03.05 and implement corrective measures as the Engineer deems appropriate.

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Cubacations	402.03.03 Verification.
Part:	B) Evaluation of Sublots Not Verified by Department.
Revision:	Replace the third sentence of the first paragraph with the following:
	When differences between test results are not within the tolerances listed below, the
G 1 4	Department will resolve the discrepancy according to Subsection 402.03.05.
	402.03.03 Verification.
Part:	B) Evaluation of Sublots Not Verified by Department.
Revision:	Replace the third sentence of the second paragraph with the following:
	When the F -test or t -test indicates that the Contractor's data and Department's data are possibly
	not from the same population, the Department will investigate the cause for the difference
	according to Subsection 402.03.05 and implement corrective measures as the Engineer deems
	appropriate.
Subsection:	402.03.03 Verification.
Part:	C) Test Data Patterns.
Revision:	Replace the second sentence with the following:
	When patterns indicate substantial differences between the verified and non-verified sublots,
	the Department will perform further comparative testing according to subsection 402.03.05.
Subsection:	402.03 CONSTRUCTION.
Revision:	Add the following subsection: 402.03.04 Testing Equipment and Technician Verification.
	For mixtures with a minimum quantity of 20,000 tons and for every 20,000 tons thereafter, the
	Department will obtain an additional verification sample at random using the Asphalt Mixture
	Sample Random Tonnage Generator in order to verify the integrity of the Contractor's and
	Department's laboratory testing equipment and technicians. The Department will obtain a
	mixture sample of at least 150 lb at the asphalt mixing plant according to KM 64-425 and split
	it according to AASHTO R 47. The Department will retain one split portion of the sample and
	provide the other portion to the Contractor. At a later time convenient to both parties, the
	Department and Contractor will simultaneously reheat the sample to the specified compaction
	temperature and test the mixture for AV and VMA using separate laboratory equipment
	according to the corresponding procedures given in Subsection 402.03.02. The Department
	will evaluate the differences in test results between the two laboratories. When the difference
	between the results for AV or VMA is not within ± 2.0 percent, the Department will investigate
	and resolve the discrepancy according to Subsection 402.03.05.
Subsection:	402.03.04 Dispute Resolution.
Revision:	Change the subsection number to 402.03.05.
Subsection:	402.05 PAYMENT.
Part:	Lot Pay Adjustment Schedule Compaction Option A Base and Binder Mixtures
Table:	AC
Revision:	Replace the Deviation from JMF(%) that corresponds to a Pay Value of 0.95 to ±0.6.
	403.01 Description.
Revision:	Replace the sentence three and four of the first paragraph with the following:
	Provide a Superpave Plant Technologist (SPT) or Superpave Mix Design Technician (SMDT)
	qualified by the Laboratories' Quality Acceptance program. Be available to address all Quality
	Control concerns arising during work performed under section 403.
	403.02.10 Material Transfer Vehicle (MTV).
Revision:	Replace the first sentence with the following:
	In addition to the equipment specified above, provide a MTV with the following minimum
	characteristics:

	1402 02 02 P
	403.03.03 Preparation of Mixture
Part:	C) Mix Design Criteria
Number:	
Revision:	Revise part 2) to read as follows: Selection of Optimum AC. Normally, the Department will
	approve the AC at an air-void content of 4.0 percent. The Engineer may assign an AC
	corresponding to other air-void levels as deemed appropriate. Ensure the optimum AC is a
	minimum of 5.2 percent by weight of the total mixture for all 0.5-inch nominal surface
	mixtures and 5.5 percent by weight of the total mixture for all 0.38-inch nominal surface
G. I. At	mixtures.
	412.02.09 Material Transfer Vehicle (MTV).
Revision:	Replace the paragraph with the following:
	Provide and utilize a MTV with the minimum characteristics outlined in section 403.02.10.
	412.03.07 Placement and Compaction.
Revision:	Replace the first paragraph with the following:
	Use a MTV when placing SMA mixture in the driving lanes. The MTV is not required on
	ramps and/or shoulders unless specified in the contract. When the Engineer determines the use
	of the MTV is not practical for a portion of the project, the Engineer may waive its requirement
	for that portion of pavement by a letter documenting the waiver.
	412.04 MEASUREMENT.
Revision:	Add the following subsection:
	412.04.03. Material Transfer Vehicle (MTV). The Department will not measure the MTV for
G.I. di	payment and will consider its use incidental to the asphalt mixture.
	501.03.19 Surface Tolerances and Testing Surface.
Part:	B) Ride Quality.
Revision:	Add the following to the end of the first paragraph:
	The Department will specify if the ride quality requirements are Category A or Category B
	when ride quality is specified in the Contract. Category B ride quality requirements shall apply
	when the Department fails to classify which ride quality requirement will apply to the Contract.
Subsection:	501.03.05 Weather Limitations and Protection.
Revision:	Replace the reference to Subsection 501.03.19 in Paragraph 5, with Subsection 501.03.20.
Subsection:	601.02.02 Cement
Revision:	Replace the third sentence with the following: The Department will allow the use of Type
	IP(≤20), Type IS(≤30), Type IL, Type II, and Type III when the Engineer approves.
Subsection:	601.02.02 Cement
Revision:	Replace the fifth sentence with the following: If unsatisfactory test results are obtained using
	Type IP(≤20), Type IS(≤30), Type IL, Type II, or Type III cement complete the work using
	Type I cement.

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Subsection:	601.03.02 Co	oncret	e Producer Respo	onsibilities.						
Part:	E) Trip Tickets.									
Revision:	Replace the section with the following:									
	Furnish a trip ticket containing the minimum information shown in the table below. Certify that									
	-						proved mix design.			
			nt manager or a l							
		_	-			_				
	Department's jobsite inspector will complete all other necessary information on the back of the									
	trip ticket.									
	Contrac	t Id:	Proj. Number:	Date:	County:					
	Truck N	o:	Producer Name:			er Sample Id:				
	Qty(Yds	³):	Time Loaded (Non	Agitated Con						
	Begin M			M PM						
	Set Reta			Yes	Type	No				
	Water F			Yes	Type	No No				
	Water I			al/Yd ³		tal Gallons				
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	Sim	nature:				Date:				
	Sigi	iature.		shnisian or Di	ant Manage					
	-		KRMCA Level II Te	chnician or Pi	ant ivianage	er				
			oning and Requi	rements						
Part:	A) Concrete									
Revision:						-	ENTS FOR VARIOUS			
	CLASSES C	F CO	NCRETE as foll	ows: Replac	e "M1 w/	Type 1 ceme	ent" with "M1 w/ Type 1			
	or blended h	<mark>ydraul</mark>	ic cement"							
Subsection:	601.03.03 Pr	oporti	<mark>oning and Requi</mark>	irements						
Part:	C) Mixtures	Using	Type IP, IS, and	d I(SM) Cem	ent or Min	eral Admixt	ures			
Revision:	Revise part (C) head	der to read as fol	llows: Mixtu	res Using	Type IP(≤20), IS(≤30), and IL			
	Cement and	Miner	al Admixtures.							
Subsection:	601.03.03 Pr	oporti	oning and Requi	rements						
Part:			Type IP, IS, and		ent or Min	eral Admixt	ures			
Number:	1)		Jr , ,,	(-2) -2 -2						
Revision:	,	senten	ce to read as follo	ows: Tyne I	P(<20) IS	(<30) IL Ce	ment			
			oning and Requi			(_50), 1L CC	iniviit.			
Part:			Type IP, IS, and		ent or Min	eral Admiyt	urec			
Number:		Osnig	1 ypc 11, 15, and	i i(Sivi) Celli	CHI OF WHILE	iciai Auminixt	ures			
Number: Revision:	2) Raviga sagar	od acre	conso to made as f	Collows, The	ugo of fl	agh blast C	rnace slag cement, or			
nevision:	ixevise secor	iu sent	ence to read as t	onows. The	use of HV	asii, biast fil	made stag dement, or			

micosilica in concrete is the Contractor's option.

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	601.03.03 Proportioning and Requirements
Part:	C) Mixtures Using Type IP, IS, and I(SM) Cement or Mineral Admixtures
Number:	2)
Revision:	Revise the first sentence in the second paragraph to read as follows: When the ability to use
	blast furnace slag cement or microsilica has not been demonstrated have the concrete producer
	provide trial batches in accordance with Subsection 601.03.02 G) 1).
Subsection:	601.03.03 Proportioning and Requirements
Part:	C) Mixtures Using Type IP, IS, and I(SM) Cement or Mineral Admixtures
Number:	2)
Part:	b)
Revision:	Revise first sentence to read as follows: Blast Furnace Slag Cement
Subsection:	601.03.03 Proportioning and Requirements
Part:	C) Mixtures Using Type IP, IS, and I(SM) Cement or Mineral Admixtures
Number:	2)
Part:	b)
Revision:	Revise second sentence to read as follows: When added as a separate ingredient, use Grade
	120 or Grade 100 slag to reduce the quantity of cement, except do not use blast furnace slag
	cement to reduce the quantity of Type IS(≤30) cement.
Subsection:	601.03.03 Proportioning and Requirements
Part:	C) Mixtures Using Type IP, IS, and I(SM) Cement or Mineral Admixtures
Number:	2)
Part:	b)
Revision:	In part b), replace all references to "GGBF slag" with "blast furnace slag cement".
	601.03.04 Classes and Primary Uses
Part:	H) Class M1
Revision:	Revise part H) to read as follows: High early strength for bridge joint repair and full or partial
	depth bridge deck patching. (Type 1 cement or blended hydraulic cement)
Subsection:	603.03.06 Cofferdams.
Revision:	Replace the seventh sentence of paragraph one with the following:
	Submit drawings that are stamped by a Professional Engineer licensed in the Commonwealth of
	Kentucky.
Subsection:	605.03.04 Tack Welding.
Revision:	Insert the subsection and the following:
	605.03.04 Tack Welding. The Department does not allow tack welding.
Subsection:	606.03.17 Special Requirements for Latex Concrete Overlays.
Part:	A) Existing Bridges and New Structures.
Number:	1) Prewetting and Grout-Bond Coat.
Revision:	Add the following sentence to the last paragraph: Do not apply a grout-bond coat on bridge
	decks prepared by hydrodemolition.
Subsection:	609.03 Construction.
Revision:	Replace Subsection 609.03.01 with the following:
	609.03.01 A) Swinging the Spans. Before placing concrete slabs on steel spans or precast
	concrete release the temporary erection supports under the bridge and swing the span free on its
	supports.
	609.03.01 B) Lift Loops. Cut all lift loops flush with the top of the precast beam once the
	beam is placed in the final location and prior to placing steel reinforcement. At locations where
	lift loops are cut, paint the top of the beam with galvanized or epoxy paint.
	1

Subgestions	611.03.02 Precast Unit Construction.
Revision:	
Kevision:	Replace the first sentence of the subsection with the following:
	Construct units according to ASTM C1577, replacing Table 1 (Design Requirements for
	Precast Concrete Box Sections Under Earth, Dead and HL-93 Live Load Conditions)
	with KY Table 1 (Precast Culvert KYHL-93 Design Table), and Section 605 with the
	following exceptions and additions:
	613.03.01 Design.
Number:	2)
Revision:	Replace "AASHTO Standard Specifications for Highway Bridges" with "AASHTO LRFD
	Bridge Design Specifications"
Subsection:	615.06.02
Revision:	Add the following sentence to the end of the subsection.
	The ends of units shall be normal to walls and centerline except exposed edges shall be beveled
	³ / ₄ inch.
Subsection:	615.06.03 Placement of Reinforcement in Precast 3-Sided Units.
Revision:	Replace the reference of 6.6 in the section to 615.06.06.
	615.06.04 Placement of Reinforcement for Precast Endwalls.
Revision:	Replace the reference of 6.7 in the section to 615.06.07.
	615.06.06 Laps, Welds, and Spacing for Precast 3-Sided Units.
Revision:	Replace the subsection with the following:
Ke vision.	Tension splices in the circumferential reinforcement shall be made by lapping. Laps may not be
	tack welded together for assembly purposes. For smooth welded wire fabric, the overlap shall
	7
	meet the requirements of AASHTO 2012 Bridge Design Guide Section 5.11.2.5.2 and
	AASHTO 2012 Bridge Design Guide Section 5.11.6.3. For deformed welded wire fabric, the
	overlap shall meet the requirements of AASHTO 2012 Bridge Design Guide Section 5.11.2.5.1
	and AASHTO 2012 Bridge Design Guide Section 5.11.6.2. The overlap of welded wire fabric
	shall be measured between the outer most longitudinal wires of each fabric sheet. For
	deformed billet-steel bars, the overlap shall meet the requirements of AASHTO 2012 Bridge
	Design Guide Section 5.11.2.1. For splices other than tension splices, the overlap shall be a
	minimum of 12" for welded wire fabric or deformed billet-steel bars. The spacing center to
	center of the circumferential wires in a wire fabric sheet shall be no less than 2 inches and no
	more than 4 inches. The spacing center to center of the longitudinal wires shall not be more
	than 8 inches. The spacing center to center of the longitudinal distribution steel for either line
	of reinforcing in the top slab shall be not more than 16 inches.
Subsection:	615.06.07 Laps, Welds, and Spacing for Precast Endwalls.
Revision:	Replace the subsection with the following:
ACVISIUII.	Splices in the reinforcement shall be made by lapping. Laps may not be tack welded together
	for assembly purposes. For smooth welded wire fabric, the overlap shall meet the requirements
	of AASHTO 2012 Bridge Design Guide Section 5.11.2.5.2 and AASHTO 2012 Bridge Design
	Guide Section 5.11.6.3. For deformed welded wire fabric, the overlap shall meet the
	requirements of AASHTO 2012 Bridge Design Guide Section 5.11.2.5.1 and AASHTO 2012
	Bridge Design Guide Section 5.11.6.2. For deformed billet-steel bars, the overlap shall meet
	the requirements of AASHTO 2012 Bridge Design Guide Section 5.11.2.1. The spacing center-
	to-center of the wire fabric sheet shall not be less than 2 inches or more than 8 inches.

Subsection:	615.08.01 Type of Test Specimen.
Revision:	Replace the subsection with the following:
	Start-up slump, air content, unit weight, and temperature tests will be performed each day on
	the first batch of concrete. Acceptable start-up results are required for production of the first
	unit. After the first unit has been established, random acceptance testing is performed daily for
	each 50 yd ³ (or fraction thereof). In addition to the slump, air content, unit weight, and
	temperature tests, a minimum of one set of cylinders shall be required each time plastic
	property testing is performed.
Subsection	615.08.02 Compression Testing.
Revision:	Delete the second sentence.
Subsection:	615.08.04 Acceptability of Core Tests.
Revision:	Delete the entire subsection.
	615.12 Inspection.
Revision:	Add the following sentences to the end of the subsection: Units will arrive at jobsite with the
	"Kentucky Oval" stamped on the unit which is an indication of acceptable inspection at the
	production facility. Units shall be inspected upon arrival for any evidence of damage resulting
	from transport to the jobsite.
Subsection:	701.04.16 Deduction for Pipe Deflection.
Revision:	Insert the following at the end of the paragraph:
	The section length is determined by the length of the pipe between joints where the failure
	occurred.
Subsection:	716.02.02 Paint.
Revision:	Replace sentence with the following: Conform to Section 821.
Subsection:	716.03 CONSTRUCTION.
Revision:	Replace bullet 5) with the following: 5) AASHTO Standard Specifications for Structural
	Supports for Highway Signs, Luminaires, and Traffic Signals, 2013-6th Edition with current
	interims,
Subsection:	716.03.02 Lighting Standard Installation.
Revision:	Replace the paragraph with the following:
	Locate poles to avoid trees, drainage, structures, etc. Regardless of the station & offset noted,
	locate all poles/bases behind guardrail a minimum of 4 feet behind the face of the guardrail.
	All poles shall be placed as close to stations and offsets as stated on Plans to provide proper
	illumination. If any pole needs to be relocated from stations indicated, the Division of Traffic
	Operations shall be contacted. When submitting brochures for suggested luminaires include
	iso lux curves, IES type distribution, lamp lumens, and typical ballast factor used for each type
	of luminaire. Submit the photometric data in a digital IES format to the Division of Traffic
	Operations. Include with the submittal a point of contact and phone number to answer
	technical questions about the luminaire.
Subsection:	716.03.02 Lighting Standard Installation.
Part:	A) Conventional Installation.
Revision:	Replace the third sentence with the following: Orient the transformer base so the door is
	positioned on the side away from on-coming traffic.
Subsection	716.03.02 Lighting Standard Installation.
Part:	A) Conventional Installation.
Number:	1) Breakaway Installation and Requirements.
	Replace the first sentence with the following: For breakaway supports, conform to Section 12
Revision:	
	of the AASHTO Standard Specifications for Structural Supports for Highway Signs,
	Luminaires, and Traffic Signals, 2013-6th Edition with current interims.

Subsection: 716.03.02 Lighting Standard Installation.

Part: B) High Mast Installation

Revision: Replace the first three sentences of the first paragraph with the following: Install each high

mast pole as noted on Plans. Install each high mast pole on a separate circuit and use luminaires

with light patterns as indicated. Orient luminaires as shown in Plans.

Subsection: 716.03.02 Lighting Standard Installation.

Part: B) High Mast Installation
Number: 2) Concrete Base Installation

Revision: Modification of Chart and succeeding paragraphs within this section:

Drilled	Drilled Shaft Depth Data						
		3:1 0	fround	2:1 (Fround	1.5:1	Ground
Level	Ground	Sl	ope	Sl	ope	Slo	pe ⁽²⁾
Soil	Rock	Soil	Rock	Soil	Rock	Soil	Rock
17 ft	7 ft	19 ft	7 ft	20 ft	7 ft	(1)	7 ft

Steel Requirements			
Vert	ical Bars	Tie	s or Spiral
Size			Spacing or
	Total	Size	Pitch
#10	16	#4	12 inch

Note 1: Shaft length is 22 feet for cohesive soil only. For cohesionless soil, contact Geotechnical Branch for design.

Note 2: Do not construct high mast drilled shafts on ground slopes steeper than 1.5:1 without the approval of the Division of Traffic Operations.

If rock is encountered during drilling operations and confirmed by the Engineer to be of sound quality, the shaft is only required to be further advanced into the rock by the length of rock socket shown in the design table. The total length of the shaft need not be longer than that of soil alone. Both longitudinal rebar length and number of ties or spiral length shall be adjusted

If a shorter depth is desired for the drilled shaft, the Contractor shall provide, for the state's review and approval, a detailed column design with individual site specific soil and rock analysis performed and approved by a Professional Engineer licensed in the Commonwealth of Kentucky.

Spiral reinforcement may be substituted for ties. If spiral reinforcement is used, one and one-half closed coils shall be provided at the ends of each spiral unit. Subsurface conditions consisting of very soft clay or very loose saturated sand could result in soil parameters weaker than those assumed. Engineer shall consult with the Geotechnical Branch if such conditions

The bottom of the drilled hole shall be firm and thoroughly cleaned so no loose or compressible materials are present at the time of the concrete placement. If the drilled hole contains standing water, the concrete shall be placed using a tremie to displace water. Continuous concrete flow will be required to insure full displacement of any water.

The reinforcement and anchor bolts shall be adequately supported in the proper positions so no movement occurs during concrete placement. Welding of anchor bolts to the reinforcing cage is unacceptable, templates shall be used. Exposed portions of the foundation shall be formed to create a smooth finished surface. All forming shall be removed upon completion of foundation construction.

Subsection:	716.03.03 Trenching.
Part:	A) Trenching of Conduit for Highmast Ducted Cables.
Revision:	Add the following after the first sentence: If depths greater than 24 inches are necessary, obtain
	the Engineer's approval and maintain the required conduit depths coming into the junction
	boxes. No payment for additional junction boxes for greater depths will be allowed.
Subsection:	716.03.03 Trenching.
Part:	B) Trenching of Conduit for Non-Highmast Cables.
Revision:	Add the following after the second sentence: If depths greater than 24 inches are necessary for
	either situation listed previously, obtain the Engineer's approval and maintain the required
	conduit depths coming into the junction boxes.
Subsection:	716.03.04 Conduit Installation.
Revision:	Replace the first two sentences of the paragraph with the following: Provide rigid steel
	conduit encasement for all conductors except as specified in the Contract. Provide conduit that
	is listed on the Department's List of Approved Materials.
Subsection:	716.03.04 Conduit Installation.
Part:	A) Conduit Requirements in Junction Boxes.
Number:	1) Highmast Ducted Cable.
Revision:	Replace the first two sentences with the following: Install conduit horizontally through the
	junction box. Conduit shall be 4 inches from the bottom and 4 inches from the side of the
~	junction box.
Subsection:	716.03.04 Conduit Installation.
Revision:	Add the following to the Part to the Subsection: G) Bore and Jack. Construction
G 1 4	methods shall be in accordance with Subsections 706.03.02, paragraphs 1, 2 and 4.
Subsection:	716.03.08 Splicing.
Revision:	Replace the last sentence of the paragraph with the following: Ensure the splices are of the correct size for the wire being used.
Subsection:	716.03.10 Junction Boxes.
Revision:	Replace subsection title with the following: Electrical Junction Box and replace the last
Revision.	sentence of the paragraph with the following: Any additional junction boxes shall be approved
	by the Engineer.
Subsection:	716.03.13 Temporary Lighting.
Revision:	Change subsection heading to the following: 716.03.13 Temporary/Maintain Lighting.
Subsection:	716.03.13 Temporary /Maintain Lighting.
Revision:	Replace the entire section with the following:
	The Contractor shall furnish and install all materials necessary to temporarily light the proposed
	roadway to design standards in Subsection 716.03. The Contractor shall submit his proposed
	design of temporary lighting to the Division of Traffic Operations for approval at least 30 days
	before installation.
	Maintain all lighting elements impacted within or outside the project limits until new lighting
	elements are installed and a functional inspection has been performed on the new lighting
	elements. The Contractor shall submit a proposed design for maintaining lighting to the
	Division of Traffic Operations for approval at least 30 days before installation.

Subsection	716.03.14 Remove Lighting.
Revision:	TOOLET TECHNOTO DIGHTING.
ACVISION.	Replace the section with the following: Remove all lighting equipment that is identified by the Engineer as no longer necessary including, but not limited to, the following: pole bases, poles, junction boxes, cabinets, and wood poles. Pole bases shall be removed a minimum of one foot below finished grade by chipping off or other method that is approved by the Engineer. Dispose of all removed concrete off right-of-way. Wood poles shall be removed a
	minimum of one foot below finished grade. Backfill holes with material approved by the Engineer. Conduit may be abandoned in the ground. All materials shall be removed from the project as directed by the Engineer. Transformers not owned by a utility shall be tested for PCB's and disposed of in accordance with state regulations.
Subsection: Revision:	716.03.15 Painting.
	Replace the first sentence with the following: Clean non-galvanized or damaged surfaces of exposed junction boxes, pull boxes, control panels, poles, and similar equipment, and apply one coat of an inhibiting paint and two coats of aluminum paint.
	716.04.01. Poles.
Revision:	Change the subsection heading to 716.04.01 Pole and replace the last sentence of the subsection with the following: The Department will not measure anchor bolts, washers, nuts, anchor bolt covers, ground lugs, and any associated hardware for payment and will consider
Cubacations	them incidental to this item of work.
Subsection: Revision:	716.04.02 High Mast Pole.
	Replace the second sentence with the following: The Department will not measure the lowering device, anchor bolts, head frame assembly, cables, winch unit, power cables, wiring, connectors, circuit breakers, grounding lugs, ground wire, ground rods, conduits, test plugs,, adjustment and calibration of the unit to provide the desired operation, and any associated hardware for payment and will consider them incidental to this item of work.
Subsection:	716.04.03 Bracket.
Revision:	Replace the second sentence with the following: The Department will not measure any associated hardware needed for attaching the bracket to the pole for payment and will consider them incidental to this item of work.
Subsection:	716.04.04 Pole Base.
Revision:	Change the subsection heading to 716.04.04 Pole Bases and delete the paragraph.
Subsection: Revision:	716.04.04 Pole Bases. Insert the following:
Revision:	A. Pole Base. The Department will measure the quantity as each individual unit furnished and installed. The Department will not measure excavation, concrete, conduits, fittings, ground rods, ground wires, ground lugs, reinforcing steel, restoring disturbed areas to the satisfaction
	of the Engineer, and any associated hardware for payment and will consider them incidental to this item of work.
	B. Pole Base High Mast. The Department will measure the quantity in cubic yards furnished and installed. The Department will not measure excavation, concrete, conduits, fittings, ground rods, ground wires, ground lugs, reinforcing steel, restoring disturbed areas to the satisfaction of the Engineer, and any associated hardware for payment and will consider
	them incidental to this item of work.

Revision: Revisi	Subsection	716.04.05 Pole Base in Median Wall.
Revision: Replace the last sentence with the following: The Department will not measure transfor door, ground lug, anchoring bolts, nuts, washers, and any associated hardware for payment will consider them incidental to this item of work. Total 16.04.07 Pole with Secondary Equipment. Revision: Replace the heading with the following: 716.04.07 Pole with Secondary Control Equipment. Replace the second and third sentence with the following: The Department will not measure furnishing and installing electrical inspection fees, and required building fees involving utility secondary, primary service for payment and will consider them incidental to this item of work. Department will also not measure furnishing and installing electrical service conduct specified conduits, meter base, transformer, service panel, fused cutout, fuses, ligh arrestors, photoelectrical control, circuit breaker, contactor, manual switch, ground reground lugs, and ground wires for payment and will consider them incidental to this item of work. Subsection: Revision: 716.04.08 Lighting Control Equipment. Replace the paragraph with the following: The Department will measure the quantity as each individual unit furnished and installed. Department will not measure the concrete base, excavation, backfilling, restoration, any necessary anchors, electrical inspection fees, and required building fees involving utility secondary/primary service for payment and will consider them incidental to this item of work the Department will also not measure furnishing and installing electrical service conductors specified conduits, meter base, transformer, service panel, fused cutout, fuses, lighting arrestors, photoelectrical control, circuit breakers, contactor, manual switch, ground rods, ground lugs, and ground wires for payment and will consider them incidental to this item of work. The Department will not measure the filling of any unused holes with and will consider them incidental to this item of work. Subsection: Revision: 716.04.09 Luminaire.	Revision:	Replace the last sentence with the following: The Department will not measure conduits, fittings, junction boxes, additional reinforcing steel, ground rods, ground wire, ground lugs, and aluminum cover plates (if specified) for payment, and will consider them incidental to this item of work.
 Revision: Replace the heading with the following: 716.04.07 Pole with Secondary Control Equipment. Revision: Replace the second and third sentence with the following: The Department will not measure mounting the cabinet to the pole, backfilling, restoration, any necessary hardware to and pole, electrical inspection fees, and required building fees involving utility secondary, primary service for payment and will consider them incidental to this item of work. Department will also not measure furnishing and installing electrical service conduct specified conduits, meter base, transformer, service panel, fused cutout, fuses, ligh arrestors, photoelectrical control, circuit breaker, contactor, manual switch, ground reground lugs, and ground wires for payment and will consider them incidental to this item work. The filling of unused holes will also be considered incidental to this item of work. Subsection: 716.04.08 Lighting Control Equipment. Revision: Revision: The Department will measure the quantity as each individual unit furnished and installed. Department will not measure the quantity as each individual unit furnished and installed. Department will not measure the concrete base, excavation, backfilling, restoration, any necessary anchors, electrical inspection fees, and required building fees involving utility secondary/primary service for payment and will consider them incidental to this item of wor The Department will also not measure furnishing and installing electrical service conductors specified conduits, meter base, transformer, service panel, fused cutout, fuses, lighting arrestors, photoelectrical control, circuit breakers, contactor, manual switch, ground rods, ground lugs, and ground wires for payment and will consider them incidental to this item of work. The Department will not measure the filling of any unused holes with and will consider them incidental to this item of work. Subsection: 716.04.09 Luminaire. Revision:		Replace the last sentence with the following: The Department will not measure transformer door, ground lug, anchoring bolts, nuts, washers, and any associated hardware for payment and will consider them incidental to this item of work. The filling of any unused holes will also be
Subsection: Revision: Replace the second and third sentence with the following: The Department will not measure processory primary service for payment and will consider them incidental to this item of work. Department will also not measure furnishing and installing electrical service conduct specified conduits, meter base, transformer, service panel, fused cutout, fuses, ligh arrestors, photoelectrical control, circuit breaker, contactor, manual switch, ground reground lugs, and ground wires for payment and will consider them incidental to this item of work. Subsection: 716.04.08 Lighting Control Equipment. Replace the paragraph with the following: The Department will measure the quantity as each individual unit furnished and installed. Department will not measure the quantity as each individual unit furnished and installed. Department will not measure the quantity as each individual unit furnished and installed. The Department will also not measure furnishing and required building fees involving utility secondary/primary service for payment and will consider them incidental to this item of work. Popartment will also not measure furnishing and installing electrical service conductor specified conduits, meter base, transformer, service panel, fused cutout, fuses, lighting arrestors, photoelectrical control, circuit breakers, contactor, manual switch, ground rods, ground lugs, and ground wires for payment and will consider them incidental to this item of work. The Department will not measure the filling of any unused holes with and will consider them incidental to this item of work. The Department will not measure the filling of any unused holes with and will consider them incidental to this item of work. The Department will not measure the filling of any unused holes with and will consider them incidental to this item of work. The Department will not measure the filling of any unused holes with and will consider them incidental to this item of work. The Department will not measure the payment and will	Subsection:	716.04.07 Pole with Secondary Equipment.
Subsection: Revision: Replace the second and third sentence with the following: The Department will not measure properties or payment and will consider them incidental to this item of work. Department will not measure furnishing and installing electrical service conduct specified conduits, meter base, transformer, service panel, fused cutout, fuses, ligh arrestors, photoelectrical control, circuit breaker, contactor, manual switch, ground reground lugs, and ground wires for payment and will consider them incidental to this item of work. Subsection: 716.04.08 Lighting Control Equipment. Replace the paragraph with the following: The Department will measure the quantity as each individual unit furnished and installed. Department will not measure the quantity as each individual unit furnished and installed. Department will not measure the quantity as each individual unit furnished and installed. Department will not measure the quantity as each individual unit furnished and installed. The Department will also not measure furnishing and required building fees involving utility secondary/primary service for payment and will consider them incidental to this item of work. In Department will also not measure furnishing and installing electrical service conductor specified conduits, meter base, transformer, service panel, fused cutout, fuses, lighting arrestors, photoelectrical control, circuit breakers, contactor, manual switch, ground rods, ground lugs, and ground wires for payment and will consider them incidental to this item of work. The Department will not measure the filling of any unused holes with and will consider them incidental to this item of work. The Department will not measure the filling of any unused holes with and will consider them incidental to this item of work. The Department will not measure the filling of any unused holes with and will consider them incidental to this item of work. The Department will not measure the paragraph with the following: Revision: The Department will not mea		
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Revision: Replace the paragraph with the following: The Department will measure the quantity as each individual unit furnished and installed. Department will not measure the concrete base, excavation, backfilling, restoration, any necessary anchors, electrical inspection fees, and required building fees involving utility secondary/primary service for payment and will consider them incidental to this item of wor The Department will also not measure furnishing and installing electrical service conductors specified conduits, meter base, transformer, service panel, fused cutout, fuses, lighting arrestors, photoelectrical control, circuit breakers, contactor, manual switch, ground rods, ground lugs, and ground wires for payment and will consider them incidental to this item of work. The Department will not measure the filling of any unused holes with and will consider them incidental to this item of work. Subsection: Revision: Replace the paragraph with the following: The Department will measure the quantity as each individual unit furnished and installed. The Department will not measure lamps, starter ballasts, drivers, surge protection, dimming modules, photo-control receptacle, specified shielding (if required), and any adjustments necessary to provide the desired lighting pattern payment and will consider them incidental to this item of work. Subsection: 716.04.10 Fused Connector Kits.		Replace the second and third sentence with the following: The Department will not measure mounting the cabinet to the pole, backfilling, restoration, any necessary hardware to anchor pole, electrical inspection fees, and required building fees involving utility secondary, and primary service for payment and will consider them incidental to this item of work. The Department will also not measure furnishing and installing electrical service conductors, specified conduits, meter base, transformer, service panel, fused cutout, fuses, lighting arrestors, photoelectrical control, circuit breaker, contactor, manual switch, ground rods, ground lugs, and ground wires for payment and will consider them incidental to this item of
The Department will measure the quantity as each individual unit furnished and installed. Department will not measure the concrete base, excavation, backfilling, restoration, any necessary anchors, electrical inspection fees, and required building fees involving utility secondary/primary service for payment and will consider them incidental to this item of work. The Department will also not measure furnishing and installing electrical service conductors specified conduits, meter base, transformer, service panel, fused cutout, fuses, lighting arrestors, photoelectrical control, circuit breakers, contactor, manual switch, ground rods, ground lugs, and ground wires for payment and will consider them incidental to this item of work. The Department will not measure the filling of any unused holes with and will consider them incidental to this item of work. Subsection: Revision: Revision: Replace the paragraph with the following: Explace the paragraph with the following: Explanation the following: Explanation the following: Explanation the following: Explanation the fill in the following: Explanation the fill in the following: Explanation the fill in the following: Explanation the following: Explanation the fill in the following: Explanation th	Subsection:	716.04.08 Lighting Control Equipment.
ballasts, drivers, surge protection, dimming modules, photo-control receptacle, specified shielding (if required), and any adjustments necessary to provide the desired lighting pattern payment and will consider them incidental to this item of work. Subsection: 716.04.10 Fused Connector Kits.	Subsection:	The Department will measure the quantity as each individual unit furnished and installed. The Department will not measure the concrete base, excavation, backfilling, restoration, any necessary anchors, electrical inspection fees, and required building fees involving utility secondary/primary service for payment and will consider them incidental to this item of work. The Department will also not measure furnishing and installing electrical service conductors, specified conduits, meter base, transformer, service panel, fused cutout, fuses, lighting arrestors, photoelectrical control, circuit breakers, contactor, manual switch, ground rods, ground lugs, and ground wires for payment and will consider them incidental to this item of work. The Department will not measure the filling of any unused holes with and will consider them incidental to this item of work. 716.04.09 Luminaire. Replace the paragraph with the following: The Department will measure the quantity as
		each individual unit furnished and installed. The Department will not measure lamps, starters, ballasts, drivers, surge protection, dimming modules, photo-control receptacle, specified shielding (if required), and any adjustments necessary to provide the desired lighting pattern for
	Subsection:	716.04.10 Fused Connector Kits.
Revision: Replace the heading with the following: 716.04.10 Fuse Connector Kits.		

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Subsection:	716.04.10 Fuse Connector Kits.
Revision:	Replace the paragraph with the following: The Department will measure the quantity as each
	individual unit furnished and installed. The Department will not measure fuses/lugs for
	payment and will consider them incidental to this item of work.
Subsection:	716.04.11 Conduit.
Revision:	Replace the second sentence with the following: The Department will not measure installation
	in ground or on structures, conduit fittings, test plugs, expansion joints with bonding straps,
	grounding lugs, drill anchors, clamps, and any additional hardware required for payment and
	will consider them incidental to this item of work.
Subsection:	716.04.12 Markers.
Revision:	Replace the section with the following: The Department will measure the quantity as each
	individual unit furnished and installed.
	716.04.13 Junction Box.
Revision:	Replace the subsection title with the following: Electrical Junction Box Type Various.
	716.04.13 Electrical Junction Box Type Various.
Revision:	Replace the section with the following: The Department will measure the quantity as each
	individual unit furnished and installed. The Department will not measure additional junction
	boxes for greater depths than those identified in Plans, #57 aggregate, backfilling, restoration of
	disturbed areas to the satisfaction of the Engineer, geotextile filter fabric, concrete, hot dipped
	galvanized cover, stainless steel screws, rubber gasket, and any associated hardware for
	payment, and will consider them incidental to this item of work.
Subsection:	716.04.13 Junction Box.
Part:	A) Junction Electrical.
Revision:	Delete Part A.
Subsection:	716.04.14 Trenching and Backfilling.
Revision:	Replace the section with the following: The Department will measure the quantity in linear
	feet. The Department will not measure excavation, backfilling, underground utility warning
	tape (if required), and the restoration of disturbed areas to original condition for payment and
	will consider them incidental to this item of work.
Subsection:	716.04.15 Wire or Cable.
Revision:	Replace the section with the following: The Department will measure the quantity in linear feet
	furnished and installed. The Department will not measure installation within conduit, splice
	boots, and any other hardware required for installing cable for payment and will consider them
	incidental to this item of work.
	716.04.16 Ducted Cable.
Revision:	Replace the second sentence of the paragraph with the following: The Department will not
	measure installation within trench or conduit and any other necessary hardware for payment
	and will consider them incidental to this item of work.
	716.04.17 Temporary Lighting
Revision:	Rename the subsection as follows: 716.04.17 Temporary Lighting/Maintain Lighting.

Subsection:	716.04.17 Temp	oorary Lighting/Maintain Lighting.				
		graph and add the following parts:				
		Lighting. The Department will measu	ure the quantity by lump sum. The			
		l not measure poles, luminaires, wire				
			gn (if required), and any other necessary			
	X X		nt and will consider them incidental to this			
	tem of work.					
		ghting. The Department will measure	e the quantity by lump sum. The			
		-	g elements and design (if required) for			
	-	ill consider them incidental to this ite				
	716.04.18 Rem					
			partment will measure the quantity by lump			
		rtment will not measure backfilling a				
			ral or electrical component of the lighting			
		· · · · · · · · · · · · · · · · · · ·	s, junction boxes, cabinets, and wood poles			
	•	d will consider them incidental to this	A Company of the Comp			
	F					
Subsection:	716.04.19 Rem	ove Pole Base.				
	Delete Subsecti					
Subsection:	716.04.20 Bore	and Jack Conduit.				
Revision:	Renumber Subs	section to 716.04.19 Bore and Jack Co	onduit.			
Subsection:	716.04.19 Bore	and Jack Conduit.				
Revision:	Replace the par	agraph with the following: The Depa	rtment will measure the quantity in linear			
	feet. This item shall include all work necessary for boring and installing conduit under an					
	existing roadwa	<u> </u>				
	716.05 PAYME					
Revision:	Revise the follo	wing under <u>Code</u> , <u>Pay Item</u> , and <u>Pay</u>	<u>Unit</u> with the following:			
	<u>Code</u>	Pay Item	Pay Unit			
	04700-04701	Pole(Various)Mtg Ht	Each			
	04710-04714	Pole(Various)Mtg Ht High Mast	Each			
	04810-04811	Electrical Junction Box (Various)	Each			
	20391NS835	Electrical Junction Box Type A	Each			
	20392NS835	Electrical Junction Box Type C	Each			
	04770-04773	Luminaire (Various)	Each			
	04780	Fuse Connector Kit	Each			
	20410ED	Maintain Lighting	Lump Sum			
	04941	Remove Pole Base	Each			
Subsection:	723.02.02 Paint	<u></u>				
	Replace sentence with the following: Conform to Section 821.					
	723.03 CONST					
	_		Standard Specifications for Structural			
	Supports for Hi	ghway Signs, Luminaires, and Traffic	c Signals, 2013-6th Edition with current			
	interims,					
Subsection:	723.03.02 Poles	and Bases Installation.				
Revision:	D 1 41 414	e with the following: 723.03.02 Pole	1.D. T. (11 ()			

Subsection	723.03.02 Pole and Base Installation.
	Replace the first paragraph with the following: Regardless of the station and offset noted,
	locate all poles/bases behind the guardrail a minimum of four feet from the front face of the
	guardrail to the front face of the pole base. Orient the handhole door away from traffic travel
	path. If pole base is installed within a sidewalk the top of the pole base shall be the same grade
	as the sidewalk.
	723.03.02 Poles and Bases Installation.
	A) Steel Strain and Mastarm Poles Installation
	Replace the title of Part A) Steel Strain and Mast Arm Pole Installation.
	723.03.02 Pole and Base Installation.
	A) Steel Strain and Mast Arm Pole Installation.
	Insert the following sentence at the beginning of the first paragraph: Install pole bases 4 to 6
	inches above grade.
	723.03.02 Pole and Base Installation.
	A) Steel Strain and Mast Arm Pole Installation.
	Replace the second paragraph with the following: For concrete base installation, see Subsection
	716.03.02 B), 2), Paragraphs 2-6. Drilled shaft depth shall be based on the soil conditions
	encountered during drilling and slope condition at the site. Refer to the design chart below:
Cubaatian	723.03.02 Pole and Base Installation.
	B) Pedestal or Pedestal Post Installation.
	Replace the second sentence with the following: If over 12 feet high the base shall have the
	minimum depth and diameter as Subsection 716.03.02 (A), paragraph 2.
	723.03.02 Poles and Bases Installation.
	B) Pedestal or Pedestal Post Installation.
	Replace the fourth sentence of the paragraph with the following: For breakaway supports,
	conform to Section 12 of the AASHTO Standard Specifications for Structural Supports for
	Highway Signs, Luminaires, and Traffic Signals, 2013-6th Edition with current interims.
	723.03.03 Trenching.
	Replace the first sentence with the following: See Subsection 716.03.03 (B).
	723.03.03 Trenching.
	A) Under Roadway.
Revision:	Delete Part A) Under Roadway.
	723.03.05 Conduit Requirements in Junction Boxes.
Revision:	Delete the Subsection and replace with the following:
	723.03.05 Fuse Connector Kits. See Subsection 716.03.09.
Subsection:	723.03.06 Coupling Installation.
Revision:	Delete the Subsection and replace with the following:
	723.03.06 Painting. See Subsection 716.03.15.
Subsection:	723.03.07 Bonding Requirements.
	Delete the Subsection and replace with the following:
	723.03.07 Electrical Junction Boxes. See Subsection 716.03.10.

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	723.03.08 Painting.
Revision:	Replace with 723.03.06 Painting. See Subsection 716.03.15.
	723.03.09 Underground Warning Tape.
	Renumber Subsection to 723.03.08 Underground Warning Tape.
Subsection:	723.03.10 Backfilling and Disturbed Areas.
Revision:	Renumber Subsection to 723.03.09 Backfilling and Disturbed Areas.
Subsection:	723.03.11 Wiring Installation.
Revision:	Renumber Subsection to 723.03.10 Wiring Installation.
Subsection:	723.03.10 Wiring Installation.
Revision:	Add the following sentence between the fifth and sixth sentences: Provide an extra two feet of
110 (151011)	loop wire and lead-in past the installed conduit in poles, pedestals, and junction boxes.
	toop who and road in past the instance conduct in pores, pedestals, and junction cones.
Subsection:	723.03.12 Loop Installation.
Revision:	Renumber Subsection to 723.03.11 Loop Installation.
Subsection:	723.03.11 Loop Installation.
Revision:	Replace the fourth sentence of the 2nd paragraph with the following: Provide an extra two feet
	of loop wire and lead-in past the installed conduit in poles, pedestals, and junction boxes.
	723.03.13 Grounding Installation.
Revision:	Renumber Subsection to 723.03.12 Grounding Installation.
Subsection:	723.03.12 Grounding Installation.
Revision:	Replace the reference to "Standard Detail Sheets" in the first sentence with "Plans".
Subsection:	723.03.14 Splicing.
Revision:	Renumber Subsection to 723.03.13 Splicing.
Subsection:	723.03.13 Splicing.
	Delete the reference to (IMSA 19-2) from the 5th sentence of the paragraph.
	723.03.15 Painting.
Revision:	Delete Subsection.
	723.03.14 Splicing.
	Replace with new Subsection 723.03.14 Remove Signal Equipment.
	723.03.14 Remove Signal Equipment.
Revision:	Insert the following for the new subsection: Remove all traffic signal equipment that is
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	identified by the Engineer as no longer necessary including, but not limited to, the following:
	pole bases, poles, junction boxes, cabinets, wood poles, and advance warning flashers. Pole
	bases shall be removed a minimum of one foot below finished grade by chipping off or other
	method that is approved by the Engineer. Dispose of all removed concrete off right-of-way.
	Wood poles shall be removed a minimum of one foot below finished grade. Backfill holes with
	material approved by the Engineer. Conduit may be abandoned in the ground. Contact the
	district traffic Engineer to determine if any removed signal equipment needs to be returned to
	the district and to determine the location/time for such deliveries.
Subsection:	723.05.16 Drawings.
	Renumber the Subsection to 723.03.15 Drawings.

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Subsection:	723.03.15 Drawings.
Revision:	Replace Subsection with the following: Before final inspection of the traffic control device, provide a complete set of reproducible as-built drawings that show the arrangement and locations of all equipment including: junction boxes, conduits, spare conduits, etc. Keep a daily record of all conduits placed in trenches, showing the distance from the pavement edge, the depth, and the length of runs, and indicate this information on the as-built drawings.
Subsection:	723.03.17 Acceptance and Inspection Requirements.
Revision:	Renumber Subsection to 723.03.16 Acceptance and Inspection Requirements.
Subsection: Revision:	723.03.16 Acceptance and Inspection Requirements. Replace the first paragraph of the section with the following: See Subsection 105.12. In coordination with the District Traffic Engineer, energize traffic control device as soon as it is fully functional and ready for inspection. After the work has been completed, conduct an operational test demonstrating that the system operates in accordance with the Plans in the presence of the Engineer. The Department will also conduct its own tests with its own equipment before final acceptance. Ensure that the traffic control device remains operational until the Division of Traffic Operations has provided written acceptance of the electrical work.
Subsection	723.04.01 Conduit.
Revision:	Replace the second sentence of the subsection with the following: The Department will not measure conduit fittings, ground lugs, test plugs, expansion joints, and clamps for payment and will consider them incidental to this item of work.
Subsection:	723.04.02 Junction Box.
Revision:	Replace subsection title with the following: Electrical Junction Box Type Various.
	723.04.02 Electrical Junction Box Type Various.
Revision:	Replace the subsection with the following: The Department will measure the quantity as each individual unit furnished and installed. The Department will not measure additional junction boxes for greater depths than those identified in Plans, Aggregate (#57), backfilling, restoration of disturbed areas to the satisfaction of the Engineer, geotextile fabric, concrete, hot dipped galvanized cover, stainless steel screws, rubber gasket, and any associated hardware for payment and will consider them incidental to this item of work.
Subsection:	723.04.03 Trenching and Backfilling.
Revision:	Replace the second sentence with the following: The Department will not measure excavation, backfilling, underground utility warning tape, and the restoration of disturbed areas to original condition for payment and will consider them incidental to this item of work.
Subsection:	723.04.04 Open Cut Roadway.
Revision:	Replace the second sentence of the subsection with the following: The Department will not measure concrete, reinforcing steel, and asphalt for payment and will consider them incidental to this item of work.
Subsection:	723.04.05 Loop Wire.
	Replace the second sentence of the subsection with the following: The Department will not measure splice boots, cable rings, and any other necessary hardware for payment and will consider them incidental to this item of work.
Subsection:	723.04.06 Cable.
Revision:	Replace the second sentence of the subsection with the following: The Department will not measure splice boots, cable rings, and any other hardware for payment and will consider them incidental to this item of work.

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	723.04.07 Pole-Wooden.
	Replace the second sentence of the subsection with the following: The Department will not
	measure excavation, backfilling, and restoring disturbed areas for payment and will consider
	them incidental to this item of work.
	723.04.08 Steel Strain Pole.
	Replace the second sentence of the subsection with the following: The Department will not
	measure excavation, backfilling, and restoring disturbed areas for payment and will consider
	them incidental to this item of work.
	723.04.09 Mast Arm Pole.
	Replace the second sentence of the subsection with the following: The Department will not
	measure anchor bolts, arms, mounting brackets, and any other necessary hardware for payment
	and will consider them incidental to this item of work.
	723.04.10 Signal Pedestal.
	Replace the second sentence of the subsection with the following: The Department will not
	measure excavation, concrete, reinforcing steel, conduits, fittings, ground rods, ground wire,
	ground lugs, backfilling, restoring disturbed areas, and other necessary hardware for payment and will consider them incidental to this item of work.
	and will consider them incidental to this item of work.
Subsections	723.04.11 Post.
	Replace the second sentence of the subsection with the following: The Department will not
	measure excavation, backfilling, and restoring disturbed areas for payment and will consider
	them incidental to this item of work.
	723.04.12 Anchor.
	Replace the second sentence of the subsection with the following: . The Department will not
	measure down-guy, messenger, clamps, guy guard, or insulators, and possible installation in
	various soil conditions for payment and will consider them incidental to this item of work.
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Subsection:	723.04.13 Messenger.
	Replace the second sentence of the subsection with the following: The Department will not
	measure strand vises, bolts, washers, and other necessary hardware for payment and will
	consider them incidental to this item of work.
	723.04.14 Install Signal LED.
Revision:	Revise subsection title to 723.04.14 Install Beacon Controller - 2 Circuit.
	723.04.14 Install Beacon Controller - 2 Circuit.
Revision:	Replace the subsection with the following: The Department will measure the quantity as each
	individual unit furnished and installed. The Department will not measure the controller
	housing, mounting equipment, S5-1 school zone sign, time clock, nema flasher, ground rods,
	ground wires, ground lugs, metering disconnect hardware, electrical inspection fees, and
	required building fees involving utility secondary/primary service for payment and will
	consider them incidental to this item of work.

Subsections	723.04.15 Loop Saw Slot and Fill.
	Replace the second sentence of the subsection with the following: The Department will not
	measure sawing, cleaning, filling induction loop saw slot, loop sealant, backer rod, drilling hole
	for conduit, and grout for payment and will consider them incidental to this item of work.
	723.04.16 Pedestrian Detector.
	Replace the subsection with the following: The Department will measure the quantity as each
	individual unit furnished, installed and connected to pole/pedestal. The Department will not
	measure installing R10-3e signs, detector housing, and installing mounting hardware for sign
	for payment and will consider them incidental to this item of work.
	723.04.17 Signal.
	Replace the second sentence of the subsection with the following: The Department will not
	measure furnishing and installing LED modules, retroreflective tape, back plates, and any other
	hardware for payment and will consider them incidental to this item of work.
Subsection:	723.04.18 Signal Controller- Type 170.
	Replace the second sentence of the subsection with the following: The Department will not
	measure the concrete base, mounting the cabinet, connecting the signal and detectors,
	excavation, backfilling, restoration, any necessary pole mounting hardware, electric service,
	electrical inspection fees, and building fees involving secondary/primary service for payment
	and will consider them incidental to this item of work. The Department will also not measure
	furnishing and connecting the induction of loop amplifiers, pedestrian isolators, load switches,
	model 400 modem card, electrical service conductors, conduits, anchors, meter base, fused
	cutout, fuses, ground rods, ground wires, and ground lugs for payment and will consider them
	incidental to this item of work.
	723.04.19 Beacon Controller - 2 Circuit.
Revision:	Replace the second sentence of the subsection with the following: The Department will not
	measure the controller housing, mounting equipment, S5-1 school zone sign, time clock, nema
	flasher, ground rods, ground wires, ground lugs, metering disconnect hardware, electrical
	inspection fees, and required building fees involving utility secondary/primary service for
	payment and will consider them incidental to this item of work.
	723.04.20 Install Signal Controller - Type 170.
	Replace the paragraph with the following: The Department will measure the quantity as each
	individual unit installed. The Department will not measure the concrete base, mounting the
	cabinet, connecting the signal and detectors, excavation, backfilling, restoration, any necessary
	pole mounting hardware, electric service, electrical inspection fees, and required building fees
	involving utility secondary/primary service for payment and will consider them incidental to
	this item of work. The Department will also not measure connecting the induction loop
	amplifiers, pedestrian isolators, load switches, model 400 modem card for payment and will
	consider them incidental to this item of work. The Department will also not measure furnishing
	and installing electrical service conductors, conduits, anchors, meter base, fused cutout, fuses,
	ground rods, ground lugs, and ground wires for payment and will consider them incidental to
	this item of work.
	723.04.21 Install Steel Strain Pole.
	Replace the second sentence of the subsection with the following: The Department will not
	measure any necessary clamp assemblies for payment and will consider them incidental to this item of work.

Subsection:	723.04.22 Remove Signal Equipment.
Revision:	Replace the paragraph with the following: The Department will measure the quantity by lump sum. The Department will not measure backfilling and the disposal or transportation of equipment and materials associated with any structural or electrical component of the signal system including, but not limited to pole bases, poles, junction boxes, cabinets, and wood poles for payment and will consider them incidental to this item of work.
Subsection: Revision:	723.04.23 Install Span/Pole Mounted Sign. Replace the second sentence of the subsection with the following: The Department will not measure the hanger or any other hardware necessary to install the sign for payment and will consider them incidental to this item of work.
Subsection: Revision:	723.04.24 Install Pedestrian Head LED. Insert the following sentence at the end of the paragraph: The Department will not measure the installation of LED modules and any other necessary hardware for payment and will consider them incidental to this item of work.
Subsection: Revision:	723.04.25 Install Signal LED. Insert the following sentence at the end of the paragraph: The Department will not measure the installation of LED modules, retroreflective tape, back plates, and any other necessary hardware for payment and will consider them incidental to this item of work.
Subsection: Revision:	723.04.26 Install Coordinating Unit. Replace the subsection with the following: The Department will measure the quantity as each individual unit installed. The Department will not measure radio, modem, cable(s), antenna(s), router, repeater, and any other necessary hardware for payment and will consider them incidental to this item of work.
Subsection: Revision:	723.04.27 Video Camera. Replace the second sentence of the subsection with the following: The Department will not measure video modules, mounting bracket, truss type arm, power cable, coaxial cable, and any other necessary hardware for payment and will consider them incidental to this item of work.
Subsection: Revision:	723.04.28 Install Pedestrian Detector Audible. Replace the second sentence with the following: The Department will not measure installing R10-3e sign, detector housing, and installing mounting hardware for payment and will consider them incidental to this item of work.
Subsection: Revision:	723.04.29 Audible Pedestrian Detector. Replace the second sentence with the following: The Department will not measure furnishing and installing the R10-3e sign, detector housing, and installing mounting hardware for payment and will consider them incidental to this item of work.
Subsection: Revision:	723.04.30 Bore and Jack Conduit. Replace the paragraph with the following: The Department will measure the quantity in linear feet. This item shall include all work necessary for boring and installing conduit under an existing roadway.

Subsection:	723.04.31 Install Pedestrian Detector.
Revision:	Replace the paragraph with the following: The Department will measure the quantity as each
	individual unit installed and connected to pole/pedestal. The Department will not measure
	installing R 10-3e sign, detector housing, and installing mounting hardware for payment and
	will consider them incidental to this item of work.
Subsection:	723.04.32 Install Mast Arm Pole.
Revision:	Replace the second sentence with the following: The Department will not measure installation
210 (101011	of arms, signal mounting brackets, anchor bolts, and any other necessary hardware for payment
	and will consider them incidental to this item of work.
Subsection:	723.04.33 Pedestal Post.
Revision:	Replace the second sentence with the following: The Department will not measure excavation,
Kevision.	backfilling, restoration, furnishing and installing concrete, reinforcing steel, anchor bolts,
	conduit, fittings, ground rod, ground wire, ground lugs, or any other necessary hardware for
	payment and will consider them incidental to this item of work.
	payment and will consider them incidental to this item of work.
	723.04.34 Span Mounted Sign.
Revision:	Revise subsection title to 723.04.34 Span/Pole-Mounted Sign.
Subsection:	723.04.34 Span/Pole-Mounted Sign.
Revision:	Replace the second sentence of the subsection with the following: The Department will not
	measure the hanger, sign, and any other necessary hardware for payment and will consider
	them incidental to this item of work.
Subsection:	723.04.35 Remove and Reinstall Coordinating Unit.
Revision:	Add the following sentence to the end of the subsection: The Department will not measure
	removing, storage, reinstalling, and connecting radio, modem, cable(s), antenna(s), router,
	repeater, and any other necessary hardware for payment and will consider them incidental to
	this item of work.
Subsection:	723.04.36 Traffic Signal Pole Base.
Revision:	Replace the second sentence of the subsection with the following: The Department will not
	measure excavation, backfilling, restoration, furnishing and installing reinforcing steel, anchor
	bolts, conduits, ground rods, ground wires, and ground lugs for payment and will consider
	them incidental to this item of work.
Subsection:	723.04.37 Install Signal Pedestal.
Revision:	Replace the second sentence of the subsection with the following: . The Department will not
	measure excavation, backfilling, restoration, furnishing and installing concrete, reinforcing
	steel, conduits, fittings, ground rod, ground wire, ground lugs, and any other necessary
	hardware for payment and will consider them incidental to this item of work.
Subsection:	723.04.38 Install Pedestal Post.
Revision:	Replace the second sentence of the subsection with the following: The Department will not
	measure excavation, backfilling, restoration, furnishing and installing concrete, reinforcing
	steel, conduit, fittings, ground rod, ground wire, ground lugs, and any other necessary hardware
	for payment and will consider them incidental to this item of work.
	723.04.39 Install Antenna.
Revision:	Replace the second sentence of the subsection with the following: The Department will not
	measure any other materials necessary to complete the installation for payment and will
	consider them incidental to this item of work.

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Subsection:	723.05 PAYMENT.				
Revision:	Replace items 04810-04811, 20391NS835, 20392NS835,23052NN and add item number				
ite vision.	24526ED under Code, Pay Item, and Pay Unit with the following:				
	2 13 2 0 E B and of	code, ray teem, and ray one w	tale following.		
	Code	Pay Item	Pay Unit		
	04810	Electrical Junction Box	Each		
	04811	Electrical Junction Box Type B			
	20391NS835	Electrical Junction Box Type A			
	20392NS835	Electrical Junction Box Type C			
	23052NN	Span/Pole-Mounted Sign	Each		
	24526ED	Install Beacon Controller 2 Cir			
Subsection			Lucii		
Revision:	801.01 REQUIREMENTS Replace first sentence in paragraph one with the following: Provide Portland cement <i>or</i>				
Kevision.			isted in the Department's List of Approved		
	Materials.	ic cement from approved limis i	isted in the Department's List of Approved		
Subsections	801.01 REQUIF	PEMENTS			
Number:	1)	CENTENTS			
Revision:		stance with the following: Type	I, II, III, and IV Portland cement conforms to		
Revision:	ASTM C 150.	thence with the following. Type	i, ii, iii, and i v i ornana cemeni comornis to		
Subsection		DEMENITO			
Number:	801.01 REQUIREMENTS				
Revision:	3) Replace the first	t contained with the following: To	/pe IP (≤20), Portland-pozzolan cement,		
Revision:			itional requirements to Type IP (≤ 20).		
	conforms to AS	TWI C393, and the following add	itional requirements to Type IP (\$20).		
Carbanation	901 01 DEOLUI	DEMENITO			
	801.01 REQUIREMENTS 3)				
Number:					
Part:	b)				
Revision:	Delete part b)				
	801.01 REQUIREMENTS				
Number:	3)				
Part:	c) Rename Part c) to Part b) and replace the text with the following: The cement manufacturer				
Revision:		*			
			results of tests performed on the fly ash used		
	in the manufacti	are of the Type IP(≤20) cement sl	nipped to the project.		
Subsection	801.01 REQUIF	REMENTS			
Number:	3)				
Part:	d)				
Revision:	Rename Part d) to Part c)				
Number:	3)				
Part:	e)				
Revision:	Rename Part e)	to Part d) and replace the text wit	th the following: Use only one brand of Type		
	IP(≤20) cement	throughout the project, unless the	Engineer approved a change in brand in		
	writing.				
Subsection:	801.01 REQUIF	REMENTS			
Number:	4)				
Revision:	Replace first ser	ntence with the following: Type	IS(≤30), Portland blast furnace slag cement,		
	conforms to ASTM C 595 and the following requirements:				

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g 1	001 01 REQUIRE (ENTO
	801.01 REQUIREMENTS
Number:	4)
Part:	a)
Revision:	Replace part a) with the following: Use Grade 100 or 120 blast furnace slag cement
	conforming to the requirements of ASTM C 989.
Subsection:	801.01 REQUIREMENTS
Number:	4)
Part:	b)
Revision:	Delete part b)
Subsection:	801.01 REQUIREMENTS
Number:	4)
Part:	c)
Revision:	Rename Part c) to Part b) and replace the text with the following: The cement manufacturer
	shall furnish to the Engineer reports showing the results of the tests performed on the blast
	furnace slag cement used in the manufacturing of the Type IS(≤30) shipped to the project.
	randee stag content used in the manufactaring of the Type 15(250) simpped to the project.
~ -	
	801.01 REQUIREMENTS
Number:	4)
Part:	d)
Revision:	Rename Part d) to Part c)
Subsection:	801.01 REQUIREMENTS
Number:	4)
Part:	e)
Revision:	Rename Part e) to Part d) and replace the text with the following: Use only one brand of Type
	IS(≤30) cement throughout the project, unless the Engineer approves otherwise.
Subsection:	801.01 REQUIREMENTS
Number:	5)
Revision:	Insert part 5) as the following: Type IL(5-15), Portland-limestone cement, conforms to ASTM
110 (181011)	C 595 and the following additional requirements:
Subsection	801.01 REQUIREMENTS
Number:	5)
Part:	a)
Revision:	Insert part a) as the following: The cement manufacturer shall furnish to the Engineer reports
IXEVISIUII.	showing the results of test performed on the limestone used in the manufacture of the Type IL
Subsection:	cement shipped to the project.
	801.01 REQUIREMENTS
Number:	5)
Part:	b)
Revision:	Insert part b) as the following: Use only one brand of Type IL cement throughout the project,
~ .	unless the Engineer approves a brand change in writing.
	801.01 REQUIREMENTS
Number:	5)
Part:	c)
Revision:	Insert part c) as the following: The Type IL blended cement shall be an intimate and uniform
	blend produced by intergrinding of the Portland cement and limestone.
Subsection:	804.01.02 Crushed Sand.
Revision:	Delete last sentence of the section.

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Subsection	804.01.06 Slag.					
Revision:						
Kevision.	Add subsection and following sentence.					
	Provide blast furnace slag sand where permitted. The Department will allow steel slag sand only in asphalt surface applications.					
Cubactions						
	804.04 Asphalt Mixtures.					
Revision:	Replace the subsection with the following:					
	Provide natural, crushed, conglomerate, or blast furnace slag sand, with the addition of filler as					
	necessary, to meet gradation requirements. The Department will allow any combination of					
	natural, crushed, conglomerate or blast furnace slag sand when the combination is achieved					
	using cold feeds at the plant. The Engineer may allow other fine aggregates.					
G 1 4'	00/ 02 01 C I D					
	806.03.01 General Requirements.					
Revision:	Replace the second sentence of the paragraph with the following:					
	Additionally, the material must have a minimum solubility of 99.0 percent when tested					
	according to AASHTO T 44 and PG 76-22 must exhibit a minimum recovery of 60 percent,					
	with a J_{NR} (non-recoverable creep compliance) between 0.1 and 0.5, when tested according to					
	AASHTO TP 70.					
	806.03.01 General Requirements.					
Table:	PG Binder Requirements and Price Adjustment Schedule					
Revision:	Replace the Elastic Recovery, % (3) (AASHTO T301) and all corresponding values in the table					
	with the following:					
	<u>Test</u> <u>Specification</u> <u>100% Pay</u> <u>90% Pay</u> <u>80% Pay</u> <u>70% Pay</u> <u>50%Pay</u> ⁽¹⁾					
	MSCR recovery, $\%^{(3)}$ 60 Min. ≥ 58 56 55 54 <53					
	(AASHTO TP 70)					
Subsection:	806.03.01 General Requirements.					
Table:	PG Binder Requirements and Price Adjustment Schedule					
Superscript:	(3)					
Revision:	Replace (3) with the following:					
	Perform testing at 64°C.					
	808.07 Polypropylene Waterproofing Membrane.					
Revision:	Replace the paragraph and table with the following: Furnish a layered waterproofing					
	membrane. The layers will consist of an internal puncture resistant woven polypropylene fabric					
	sandwiched between two rubberized mastic layers. The mastic will have a heavy polyethylene					
	membrane attached on the top and the bottom mastic layer will be covered by a protective					
	release film.					
Subsection:	808.09 Acceptance.					
Revision:	Replace the reference to "KMIMS" in the second paragraph with SiteManager.					
Subsection:	811.10.04 Properties of the Coated Bar.					
Part:	B) Flexibility of Coating.					
Revision:	Replace the second sentence of the paragraph with the following: Ensure that the coated bars					
	are capable of being bent to 180 degrees (after rebound) over a mandrel, without any visible					
	evidence of cracking the coating.					
Subsection:	813.04 Gray Iron Castings.					
Revision:	Replace the reference to "AASHTO M105" with "ASTM A48".					
Subsection:						
Number:	A) Bolts.					
Revision:	Delete first paragraph and "Hardness Number" Table. Replace with the following:					
	Delete first paragraph and "Hardness Number" Table. Replace with the following:					
	A) Bolts. Conform to ASTM A325 (AASHTO M164) or ASTM A490 (AASHTO 253) as					

G 1	014.04.00 Ti 1 . G . 1 'I B				
	814.04.02 Timber Guardrail Posts.				
Revision:	Third paragraph, replace the reference to "AWPA C14" with "AWPA U1, Section B,				
	Paragraph 4.1".				
Subsection:	814.04.02 Timber Guardrail Posts.				
Revision:	Replace the first sentence of the fourth paragraph with the following:				
	Use any of the species of wood for round or square posts covered under AWPA U1.				
Subsection:	814.04.02 Timber Guardrail Posts.				
Revision:	Fourth paragraph, replace the reference to "AWPA C2" with "AWPA U1, Section B,				
	Paragraph 4.1".				
Subsection:	814.04.02 Timber Guardrail Posts.				
Revision:	Delete the second sentence of the fourth paragraph.				
Subsection:	814.05.02 Composite Plastic.				
Revision:	1) Add the following to the beginning of the first paragraph: Select composite offset blocks				
	conforming to this section and assure blocks are from a manufacturer included on the				
	Department's List of Approved Materials.				
	2) Delete the last paragraph of the subsection.				
Subsection:	816.07.02 Wood Posts and Braces.				
Revision:	First paragraph, replace the reference to "AWPA C5" with "AWPA U1, Section B, Paragraph				
	4.1".				
Subsection:	816.07.02 Wood Posts and Braces.				
Revision:	Delete the second sentence of the first paragraph.				
	818.07 Preservative Treatment.				
	First paragraph, replace all references to "AWPA C14" with "AWPA U1, Section A".				
110 (151011)					
Cubaction	833.01.02 Sheeting Signs.				
Revision:	Replace the second sentence with the following: Provide a thickness of 125 mils if any single				
C14	edge dimension of the sign exceeds 3 feet.				
	834.14 Lighting Poles.				
Revision:	Replace the first sentence with the following: Lighting pole design shall be in accordance with				
	loading and allowable stress requirements of the AASHTO Standard Specifications for				
	Structural Supports for Highway Signs, Luminaires, and Traffic Signals, 2013-6th Edition with				
	current interims, with the exception of the following: The Cabinet will waive the requirement				
	stated in the first sentence of Section 5.14.6.2 – Reinforced Holes and Cutouts for high mast				
	poles (only). The minimum diameter at the base of the pole shall be 22 inches for high mast				
	poles (only).				
Subsection	834.14.03 High Mast Poles.				
Revision:	Remove the second and fourth sentence from the first paragraph.				
Subsection	834.14.03 High Mast Poles.				
Revision:	Replace the third paragraph with the following: Provide calculations and drawings that are				
	stamped by a Professional Engineer licensed in the Commonwealth of Kentucky.				
	of a recessional Engineer needed in the Commonwealth of Rentwesty.				

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Subsection: Revision:

Subsection: 834.14.03 High Mast Poles.

Replace paragraph six with the following: Provide a pole section that conforms to ASTM A 595 grade A with a minimum yield strength of 55 KSI or ASTM A 572 with a minimum yield strength of 55 KSI. Use tubes that are round or 16 sided with a four inch corner radius, have a constant linear taper of .144 in/ft and contain only one longitudinal seam weld. Circumferential welded tube butt splices and laminated tubes are not permitted. Provide pole sections that are telescopically slip fit assembled in the field to facilitate inspection of interior

sections that are telescopically slip fit assembled in the field to facilitate inspection of interior surface welds and the protective coating. The minimum length of the telescopic slip splices shall be 1.5 times the inside diameter of the exposed end of the female section. Use longitudinal seam welds as commended in Section 5.15 of the AASHTO 2013 Specifications. The thickness of the transverse base shall not be less than 2 inches. Plates shall be integrally welded to the tubes with a telescopic welded joint or a full penetration groove weld with backup bar.

The handhole cover shall be removable from the handhole frame. One the frame side opposite the hinge, provide a mechanism on the handhole cover/frame to place the Department's standard padlock as specified in Section 834.25. The handhole frame shall have two stainless studs installed opposite the hinge to secure the handhole cover to the frame which includes providing stainless steel wing nuts and washers. The handhole cover shall be manufactured from 0.25 inch thick galvanized steel (ASTM A 153) and have a neoprene rubber gasket that is permanently secured to the handhole frame to insure weather-tight protection. The hinge shall be manufactured from 7-guage stainless steel to provide adjustability to insure weather-tight fit for the cover. The minimum clear distance between the transverse plate and the bottom opening of the handhole shall not be less than the diameter of the bottom tube of the pole but needs to be at least 15 inches. Provide products that are hot-dip galvanized to the requirements of either ASTM A123 (fabricated products) or ASTM A 153 (hardware items).

Subsection:

834.16 ANCHOR BOLTS.

Revision:

Insert the following sentence at the beginning of the paragraph: The anchor bolt design shall follow the NCHRP Report 494 Section 2.4 and NCHRP 469 Appendix A Specifications.

Subsection:

834.17.01 Conventional.

Revision:

Add the following sentence after the second sentence: Provide a waterproof sticker mounted on the bottom of the housing that is legible from the ground and indicates the wattage of the fixture by providing the first two numbers of the wattage.

Subsection

Subsection: | 834.21.01 Waterproof Enclosures.

Revision:

Replace the last five sentences in the second paragraph with the following sentences: Provide a cabinet door with a louvered air vent, filter-retaining brackets and an easy to clean metal filter. Provide a cabinet door that is keyed with a factory installed standard no. 2 corbin traffic control key. Provide a light fixture with switch and bulb. Use a 120-volt fixture and utilize a L.E.D. bulb (equivalent to 60 watts minimum). Fixture shall be situated at or near the top of the cabinet and illuminate the contents of the cabinet. Provide a 120 VAC GFI duplex receptacle in the enclosure with a separate 20 amp breaker.

Subsection	835.07 Traffic Poles.				
Revision:	Replace the first sentence of the first paragraph with the following: Pole diameter and wall				
Ke vision.	nickness shall be calculated in accordance with the AASHTO Standard Specifications for				
	Structural Supports for Highway Signs, Luminaires, and Traffic Signals, 2013-6th Edition with				
	current interims.				
Subsection:	835.07 Traffic Poles.				
	*Replace the first sentence of the fourth paragraph with the following: Ensure transverse plates				
Revision:					
	have a thickness ≥ 2 inches.				
	*Add the following sentence to the end of the fourth paragraph: The bottom pole diameter				
~	shall not be less than 16.25 inches.				
	835.07 Traffic Poles.				
Revision:	Replace the third sentence of the fifth paragraph with the following: For anchor bolt design,				
	pole forces shall be positioned in such a manner to maximize the force on any individual				
	anchor bolt regardless of the actual anchor bolt orientation with the pole.				
Subsection:	835.07 Traffic Poles.				
Revision:	Replace the first and second sentence of the sixth paragraph with the following:				
	The pole handhole shall be 25 inches by 6.5 inches. The handhole cover shall be removable				
	from the handhole frame. On the frame side opposite the hinge, provide a mechanism on the				
	handhole cover/frame to place the Department's standard padlock as specified in Section				
	834.25. The handhole frame shall have two stainless studs installed opposite the hinge to				
	secure the handhole cover to the frame which includes providing stainless steel wing nuts and				
	washers. The handhole cover shall be manufactured from 0.25 inch thick galvanized steel				
	(ASTM 153) and have a neoprene rubber gasket that is permanently secured to the handhole				
	frame to insure weather-tight protection. The hinge shall be manufactured from 7 gauge				
	stainless steel to provide adjustability to insure a weather-tight fit for the cover. The minimum				
	clear distance between the transverse plate and the bottom opening of the handhole shall not be				
	less than the diameter of the bottom tube but needs to be at least 12 inches.				
	less than the diameter of the bottom tube but needs to be at least 12 menes.				
Subsection:	835.07 Traffic Poles.				
Revision:	*Replace the first sentence of the last paragraph with the following: Provide calculations and				
	drawings that are stamped by a Professional Engineer licensed in the Commonwealth of				
	Kentucky.				
	*Replace the third sentence of the last paragraph with the following: All tables referenced in				
	835.07 are found in the AASHTO Standard Specifications for Structural Supports for Highway				
	Signs, Luminaires, and Traffic Signals, 2013-6th Edition with current interims.				
Subsection:	835.07.01 Steel Strain Poles.				
Revision:	Replace the second sentence of the second paragraph with the following:				
-	The detailed analysis shall be certified by a Professional Engineer licensed in the				
	Commonwealth of Kentucky.				
Subsection:	835.07.01 Steel Strain Poles.				
Revision:	Replace number 7. after the second paragraph with the following: 7. Fatigue calculations				
IXC VISIUII.	should be shown for all fatigue related connections. Provide the corresponding detail, stress				
	1				
Cubaast'	category and example from table 11.9.3.1-1.				
	835.07.02 Mast Arm Poles.				
Revision:	Replace the second sentence of the fourth paragraph with the following: The detailed analysis				
	shall be certified by a Professional Engineer licensed in the Commonwealth of Kentucky.				

Subsections	835.07.02 Mast Arm Po	lec			
Revision:					
Revision:	Replace number 7) after the fourth paragraph with the following: 7) Fatigue calculations should be shown for all fatigue related connections. Provide the corresponding detail, stress				
	category and example from table 11.9.3.1-1.				
G 1 4°					
	835.07.03 Anchor Bolts				
Revision:	Add the following to the end of the paragraph: There shall be two steel templates (one can be				
	_	of the anchor bolt when designed in			
		ained within a 26.5 inch diameter. A	All templates shall be fully		
	galvanized (ASTM A 1:				
	835.16.05 Optical Units				
Revision:	Replace the 3rd paragra				
		lucts can be found on the following	website: http://www.intertek.com.		
Subsection:	835.19.01 Pedestrian De	•			
Revision:		ee with the following: Provide a four	•		
		is compatible with the pedestrian de	etector.		
Subsection:	843.01.01 Geotextile Fa	bric.			
Table:	TYPE I FABRIC GEOT	TEXTILES FOR SLOPE PROTECT	ION AND CHANNEL LINING		
Revision:	Add the following to the	e chart:			
	Property	Minimum Value ⁽¹⁾	Test Method		
	CBR Puncture (lbs)	494	ASTM D6241		
	Permittivity (1/s)	0.7	ASTM D4491		
	1 0111111111111111111111111111111111111	0.7	7101111 11111		
Subsection:	843.01.01 Geotextile Fa	bric.			
Table:	TYPE II FABRIC GEO	TEXTILES FOR UNDERDRAINS			
Revision:	Add the following to the	e chart:			
	Property	Minimum Value ⁽¹⁾	Test Method		
	CBR Puncture (lbs)	210	ASTM D6241		
	Permittivity (1/s)	0.5	ASTM D0241 ASTM D4491		
	1 Climitivity (1/3)	0.3	ASIM DTT/I		
Subsection:	843.01.01 Geotextile Fa	bric.			
Table:		OTEXTILES FOR SUBGRADE OR	EMBANKMENT		
-	STABILIZATION				
Revision:	Add the following to the	e chart:			
	Property	Minimum Value ⁽¹⁾	Test Method		
	CBR Puncture (lbs)	370	ASTM D6241		
	Permittivity (1/s)	0.05	ASTM D4491		
	r cimituvity (1/8)	0.03	ASTW D4491		
Subsection:	843.01.01 Geotextile Fa	bric			
Table:			DRAINAGE BLANKETS AND		
I ant.	TYPE IV FABRIC GEOTEXTILES FOR EMBANKMENT DRAINAGE BLANKETS AND PAVEMENT EDGE DRAINS				
Revision:	Add the following to the				
Revision:	_				
	Property	Minimum Value ⁽¹⁾	<u>Test Method</u>		
	CBR Puncture (lbs)	309	ASTM D6241		
	Permittivity (1/s)	0.5	ASTM D4491		

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Subsection: 843.01.01 Geotextile Fabric.

 Table:
 TYPE V HIGH STRENGTH GEOTEXTILE FABRIC

Revision: Make the following changes to the chart:

<u>Property</u> <u>Minimum Value⁽¹⁾</u> <u>Test Method</u>

CBR Puncture (lbs) 618 ASTM D6241

Apparent Opening Size U.S. #40⁽³⁾ ASTM D4751

(3) Maximum average roll value.

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SPECIAL NOTE FOR PORTABLE CHANGEABLE MESSAGE SIGNS

This Special Note will apply when indicated on the plans or in the proposal.

1.0 DESCRIPTION. Furnish, install, operate, and maintain variable message signs at the locations shown on the plans or designated by the Engineer. Remove and retain possession of variable message signs when they are no longer needed on the project.

2.0 MATERIALS.

2.1 General. Use LED Variable Message Signs Class I, II, or III, as appropriate, from the Department's List of Approved Materials.

Unclassified signs may be submitted for approval by the Engineer. The Engineer may require a daytime and nighttime demonstration. The Engineer will make a final decision within 30 days after all required information is received.

2.2 Sign and Controls. All signs must:

- Provide 3-line messages with each line being 8 characters long and at least 18 inches tall. Each character comprises 35 pixels.
- Provide at least 40 preprogrammed messages available for use at any time.
 Provide for quick and easy change of the displayed message; editing of the message; and additions of new messages.
- 3) Provide a controller consisting of:
 - a) Keyboard or keypad.
 - b) Readout that mimics the actual sign display. (When LCD or LCD type readout is used, include backlighting and heating or otherwise arrange for viewing in cold temperatures.)
 - c) Non-volatile memory or suitable memory with battery backup for storing pre-programmed messages.
 - d) Logic circuitry to control the sequence of messages and flash rate.
- 4) Provide a serial interface that is capable of supporting complete remote control ability through land line and cellular telephone operation. Include communication software capable of immediately updating the message, providing complete sign status, and allowing message library queries and updates.
- 5) Allow a single person easily to raise the sign to a satisfactory height above the pavement during use, and lower the sign during travel.
- Be Highway Orange on all exterior surfaces of the trailer, supports, and controller cabinet.
- 7) Provide operation in ambient temperatures from -30 to + 120 degrees Fahrenheit during snow, rain and other inclement weather.
- 8) Provide the driver board as part of a module. All modules are interchangeable, and have plug and socket arrangements for disconnection and reconnection. Printed circuit boards associated with driver boards have a conformable coating to protect against moisture.
- Provide a sign case sealed against rain, snow, dust, insects, etc. The lens is UV stabilized clear plastic (polycarbonate, acrylic, or other approved material) angled to prevent glare.
- 10) Provide a flat black UV protected coating on the sign hardware, character PCB, and appropriate lens areas.
- 11) Provide a photocell control to provide automatic dimming.

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- 12) Allow an on-off flashing sequence at an adjustable rate.
- 13) Provide a sight to aim the message.
- 14) Provide a LED display color of approximately 590 nm amber.
- 15) Provide a controller that is password protected.
- 16) Provide a security device that prevents unauthorized individuals from accessing the controller.
- 17) Provide the following 3-line messages preprogrammed and available for use when the sign unit begins operation:

 $/KEEP/RIGHT/\Rightarrow\Rightarrow\Rightarrow/$ /MIN/SPEED/**MPH/ /ICY/BRIDGE/AHEAD/ /ONE /KEEP/LEFT/< LANE/BRIDGE/AHEAD/ /LOOSE/GRAVEL/AHEAD/ /ROUGH/ROAD/AHEAD/ /RD WORK/NEXT/**MILES/ /MERGING/TRAFFIC/AHEAD/ /TWO WAY/TRAFFIC/AHEAD/ /NEXT/***/MILES/ /PAINT/CREW/AHEAD/ /HEAVY/TRAFFIC/AHEAD/ /REDUCE/SPEED/**MPH/ /SPEED/LIMIT/**MPH/ /BRIDGE/WORK/***0 FT/ /BUMP/AHEAD/ /MAX/SPEED/**MPH/ /TWO/WAY/TRAFFIC/ /SURVEY/PARTY/AHEAD/

*Insert numerals as directed by the Engineer.

Add other messages during the project when required by the Engineer.

2.3 Power.

- Design solar panels to yield 10 percent or greater additional charge than sign consumption. Provide direct wiring for operation of the sign or arrow board from an external power source to provide energy backup for 21 days without sunlight and an on-board system charger with the ability to recharge completely discharged batteries in 24 hours.
- **3.0 CONSTRUCTION.** Furnish and operate the variable message signs as designated on the plans or by the Engineer. Ensure the bottom of the message panel is a minimum of 7 feet above the roadway in urban areas and 5 feet above in rural areas when operating. Use Class I, II, or III signs on roads with a speed limit less than 55 mph. Use Class I or II signs on roads with speed limits 55 mph or greater.

Maintain the sign in proper working order, including repair of any damage done by others, until completion of the project. When the sign becomes inoperative, immediately repair or replace the sign. Repetitive problems with the same unit will be cause for rejection and replacement.

Use only project related messages and messages directed by the Engineer, unnecessary messages lessen the impact of the sign. Ensure the message is displayed in either one or 2 phases with each phase having no more than 3 lines of text. When no message is needed, but it is necessary to know if the sign is operable, flash only a pixel.

When the sign is not needed, move it outside the clear zone or where the Engineer directs. Variable Message Signs are the property of the Contractor and shall be removed from the project when no longer needed. The Department will not assume ownership of these signs.

4.0 MEASUREMENT. The final quantity of Variable Message Sign will be

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the actual number of individual signs acceptably furnished and operated during the project. The Department will not measure signs replaced due to damage or rejection.

5.0 PAYMENT. The Department will pay for the Variable Message Signs at the unit price each. The Department will not pay for signs replaced due to damage or rejection. Payment is full compensation for furnishing all materials, labor, equipment, and service necessary to, operate, move, repair, and maintain or replace the variable message signs. The Department will make payment for the completed and accepted quantities under the following:

CodePay ItemPay Unit02671Portable Changeable Message SignEach

Effective June 15, 2012

SPECIAL NOTE FOR ROCK BLASTING

This Special Note will apply when indicated on the plans or in the proposal. Section references herein are to the Department's 2012 Standard Specifications for Road and Bridge Construction.

- **1.0 DESCRIPTION.** This work consists of fracturing rock and constructing stable final rock cut faces using presplit blasting and production blasting techniques.
- **2.0 MATERIALS.** Deliver, store, and use explosives according to the manufacturer's recommendations and applicable laws. Do not use explosives outside their recommended use date. Verify date of manufacture and provide copies of the technical data sheets (TDS) and material safety data sheets (MSDS) to the Engineer. Explosives and initiating devices include, but are not necessarily limited to, dynamite and other high explosives, slurries, water gels, emulsions, blasting agents, initiating explosives, detonators, blasting caps, and detonating cord.
- **3.0 CONSTRUCTION.** Furnish copies or other proof of all-applicable permits and licenses. Comply with Federal, State, and local regulations on the purchase, transportation, storage, and use of explosive material. Regulations include but are not limited to the following:
 - 1) KRS 351.310 through 351.9901.
 - 2) 805 KAR 4:005 through 4:165
 - 3) Applicable rules and regulations issued by the Office of Mine Safety and Licensing.
 - 4) Safety and health. OSHA, 29 CFR Part 1926, Subpart U.
 - 5) Storage, security, and accountability. Bureau of Alcohol, Tobacco, and Firearms (BATF), 27 CFR Part 181.
 - 6) Shipment. DOT, 49 CFR Parts 171-179, 390-397.
- **3.1 Blaster-in-Charge.** Designate in writing a blaster-in-charge and any proposed alternates for the position. Submit documentation showing the blaster-in-charge, and alternates, have a valid Kentucky blaster's license. Ensure the blaster-in-charge or approved alternate is present at all times during blasting operations.
- 3.2 **Blasting Plans.** Blasting plans and reports are for quality control and record keeping purposes. Blasting reports are to be signed by the blaster-in-charge or the alternate blaster-in-charge. The general review and acceptance of blasting plans does not relieve the Contractor of the responsibility whatsoever for conformance to regulations or for obtaining the required results. All blasting plans shall be submitted to the Engineer. The Engineer will be responsible for submitting the plan to the Central Office Division of Construction and the Division of Mine Reclamation and Enforcement, Explosives and Blasting Branch at the following address: 2 Hudson Hollow, Frankfort, Kentucky, 40601.
 - **A) General Blasting Plan.** Submit a general blasting plan for acceptance at least 15 working days before drilling operations begin. Include, as a minimum, the following safety and procedural details:

- 1) Working procedures and safety precautions for storing, transporting, handling, detonating explosives. Include direction on pre and post blast audible procedures, methods of addressing misfires, and methods of addressing inclement weather, including lightning.
- 2) Proposed product selection for both dry and wet holes. Furnish Manufacturer's TDS and MSDS for all explosives, primers, initiators, and other blasting devices.
- 3) Proposed initiation and delay methods.
- 4) Proposed format for providing all the required information for the site specific blasting shot reports.
- B) Preblast Meeting. Prior to drilling operations, conduct a preblast meeting to discuss safety and traffic control issues and any site specific conditions that will need to be addressed. Ensure, at a minimum, that the Engineer or lead inspector, Superintendent, blaster-in-charge, and all personnel involved in the blasting operation are present. Site specific conditions include blast techniques; communication procedures; contingency plans and equipment for dealing with errant blast material. The conditions of the General Blasting plan will be discussed at this meeting. Record all revisions and additions made to the blasting plan and obtain written concurrence by the blaster-in-charge. Provide a copy of the signed blast plan to the Engineer along with the sign in sheet from the preblast meeting.
- **3.3 Preblast Condition Survey and Vibration Monitoring and Control.** Before blasting, arrange for a preblast condition survey of nearby buildings, structures, or utilities, within 500 feet of the blast or that could be at risk from blasting damage. Provide the Engineer a listing of all properties surveyed and any owners denying entry or failing to respond. Notify the Engineer and occupants of buildings at risk at least 24 hours before blasting.

Limit ground vibrations and airblast to levels that will not exceed limits of 805 KAR 4:005 through 4:165. More restrictive levels may be specified in the Contract.

Size all blast designs based on vibration, distance to nearest building or utility, blast site geometry, atmospheric conditions and other factors. Ground vibrations are to be controlled according to the blasting standards and scaled distance formulas in 805 KAR 4:020 or by the use of seismographs as allowed in 805 KAR 4:030. The Department will require seismographs at the nearest allowable location to the protected site when blasting occurs within 500 feet of buildings, structures, or utilities.

3.4 Blasting. Drill and blast at the designated slope lines according to the blasting plan. Perform presplitting to obtain smooth faces in the rock and shale formations. Perform the presplitting before blasting and excavating the interior portion of the specified cross section at any location. The Department may allow blasting for fall benches and haul roads prior to presplitting when blasting is a sufficient distance from the final slope and results are satisfactory to the Engineer. Use the types of explosives and blasting accessories necessary to obtain the required results.

Free blast holes of obstructions for their entire depth. Place charges without caving the blast hole walls. Stem the upper portion of all blast holes with dry sand or other granular material passing the 3/8-inch sieve. Dry drill cuttings are acceptable for stemming when blasts are more than 800 feet from the nearest dwelling.

Stop traffic during blasting operations when blasting near any road and ensure traffic does not pass through the Danger Zone. The blaster-in-charge will define the Danger Zone prior to each blast. Ensure traffic is stopped outside the Danger Zone, and in no case within 800 feet of the blast location.

Following a blast, stop work in the entire blast area, and check for misfires before allowing worker to return to excavate the rock.

Remove or stabilize all cut face rock that is loose, hanging, or potentially dangerous. Leave minor irregularities or surface variations in place if they do not create a hazard. Drill the next lift only after the cleanup work and stabilization work is complete.

When blasting operations cause fracturing of the final rock face, repair or stabilize it in an approved manner at no cost to the Department.

Halt blasting operations in areas where any of the following occur:

- 1) Slopes are unstable;
- 2) Slopes exceed tolerances or overhangs are created;
- 3) Backslope damage occurs;
- 4) Safety of the public is jeopardized;
- 5) Property or natural features are endangered;
- 6) Fly rock is generated; or
- 7) Excessive ground or airblast vibrations occur in an area where damage to buildings, structures, or utilities is possible.
- 8) The Engineer determines that materials have become unsuitable for blasting

Blasting operations may continue at a reasonable distance from the problem area or in areas where the problems do not exist. Make the necessary modifications to the blasting operations and perform a test blast to demonstrate resolution of the problem.

- **A) Drill Logs.** Maintain a layout drawing designating hole numbers with corresponding drill logs and provide a copy of this information to the blaster prior to loading the hole. Ensure the individual hole logs completed by the driller(s) show their name; date drilled; total depth drilled; and depths and descriptions of significant conditions encountered during drilling that may affect loading such as water, voids, changes in rock type.
- **B) Presplitting.** Conduct presplitting operations in conformance with Subsection 204.03.04 of the Standard Specifications for Road and Bridge Construction.
- **3.5 Shot Report.** Maintain all shot reports on site for review by the Department. Within one day after a blast, complete a shot report according to the record keeping requirements of 805 KAR 4:050. Include all results from airblast and seismograph monitoring.
- **3.6 Unacceptable Blasting.** When unacceptable blasting occurs, the Department will halt all blasting operations. Blasting will not resume until the Department completes its investigation and all concerns are addressed. A blast is unacceptable when it results in fragmentation beyond the final rock face, fly rock, excessive vibration or airblast, overbreak, damage to the final rock face or overhang. Assume the cost for all resulting damages to private and public property and hold the Department harmless.

When an errant blast or fly rock causes damage to or blocks a road or conveyance adjacent to the roadway, remove all debris from the roadway as quickly as practicable and perform any necessary repairs. Additionally, when specified in the Contract, the Department will apply a penalty.

Report all blasting accidents to the Division of Mine Reclamation and Enforcement, Explosives and Blasting Branch at 502-564-2340.

4.0 MEASUREMENT AND PAYMENT. The Department will not measure this work for payment and will consider all items contained in this note to be incidental to either Roadway Excavation or Embankment-in-Place, as applicable. However, if the Engineer directs in writing slope changes, then the Department will pay for the second presplitting operation as Extra Work.

The Department will measure for payment material lying outside the typical section due to seams, broken formations, or earth pockets, including any earth overburden removed with this material, only when the work is performed under authorized adjustments.

The Department will not measure for payment any extra material excavated because of the drill holes being offset outside the designated slope lines.

The Department will not measure for payment any material necessary to be removed due to the inefficient or faulty blasting practices.

June 15, 2012

SPECIAL NOTE FOR LONGITUDINAL PAVEMENT JOINT ADHESIVE

- 1. DESCRIPTION. This specification covers the requirements and practices for applying an asphalt adhesive material to the longitudinal joint of the surface course of an asphalt pavement. Apply the adhesive to the face of longitudinal joint between driving lanes for the first lane paved. Then, place and compact the adjacent lane against the treated face to produce a strong, durable, waterproof longitudinal joint.
- 2. MATERIALS, EQUIPMENT, AND PERSONNEL.
 - 2.1 Joint Adhesive. Provide material conforming to Subsection 2.1.1.
 - 2.1.1 Provide an adhesive conforming to the following requirements:

Property	Specification	Test Procedure
Viscosity, 400 ° F (Pa·s)	4.0 – 10.0	ASTM D 4402
Cone Penetration, 77 ° F	60 – 100	ASTM D 5329
Flow, 140 ° F (mm)	5.0 max.	ASTM D 5329
Resilience, 77 ° F (%)	30 min.	ASTM D 5329
Ductility, 77 ° F (cm)	30.0 min.	ASTM D 113
Ductility, 39 ° F (cm)	30.0 min.	ASTM D 113
Tensile Adhesion, 77 ° F (%)	500 min.	ASTM D 5329, Type II
Softening Point, ° F	171 min.	AASHTO T 53
Asphalt Compatibility	Pass	ASTM D 5329

Ensure the temperature of the pavement joint adhesive is between 380 and 410 °F when the material is extruded in a 0.125-inch-thick band over the entire face of the longitudinal joint.

- 2.2. Equipment.
- 2.2.1 Melter Kettle. Provide an oil-jacketed, double-boiler, melter kettle equipped with any needed agitation and recirculating systems.
- 2.2.2 Applicator System. Provide a pressure-feed-wand applicator system with an applicator shoe attached.
- 2.3 Personnel. Ensure a technical representative from the manufacturer of the pavement joint adhesive is present during the initial construction activities and available upon the request of the Engineer.

3. CONSTRUCTION.

3.1 Surface Preparation. Prior to the application of the pavement joint adhesive, ensure the face of the longitudinal joint is thoroughly dry and free from dust or any other debris that would inhibit adhesion. Clean the joint face by the use of compressed air.

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Ensure this preparation process occurs shortly before application to prevent the return of debris on the joint face.

- 3.2 Pavement Joint Adhesive Application. Ensure the ambient temperature is a minimum of 40 °F during the application of the pavement joint adhesive. Prior to applying the adhesive, demonstrate competence in applying the adhesive according to this note to the satisfaction of the Engineer. Heat the adhesive in the melter kettle to the specified temperature range. Pump the adhesive from the melter kettle through the wand onto the vertical face of the cold joint. Apply the adhesive in a continuous band over the entire face of the longitudinal joint. Do not use excessive material in either thickness or location. Ensure the edge of the extruded adhesive material is flush with the surface of the pavement. Then, place and compact the adjacent lane against the joint face. Remove any excessive material extruded from the joint after compaction (a small line of material may remain).
- 3.3 Pavement Joint Adhesive Certification. Furnish the joint adhesive's certification to the Engineer stating the material conforms to all requirements herein prior to use.
- 3.4 Sampling and Testing. The Department will require a random sample of pavement joint adhesive from each manufacturer's lot of material. Extrude two 5 lb. samples of the heated material and forward the sample to the Division of Materials for testing. Reynolds oven bags, turkey size, placed inside small cardboard boxes or cement cylinder molds have been found suitable. Ensure the product temperature is 400°F or below at the time of sampling.
- 4. MEASUREMENT. The Department will measure the quantity of Pavement Joint Adhesive in linear feet. The Department will not measure for payment any extra materials, labor, methods, equipment, or construction techniques used to satisfy the requirements of this note. The Department will not measure for payment any trial applications of Pavement Joint Adhesive, the cleaning of the joint face, or furnishing and placing the adhesive. The Department will consider all such items incidental to the Pavement Joint Adhesive.
- 5. PAYMENT. The Department will pay for the Pavement Joint Adhesive at the Contract unit bid price and apply an adjustment for each manufacturer's lot of material based on the degree of compliance as defined in the following schedule. When a sample fails on two or more tests, the Department may add the deductions, but the total deduction will not exceed 100 percent.

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Pavement Joint Adhesive Price Adjustment Schedule						
Test	Specification	100% Pay	90% Pay	80% Pay	50% Pay	0% Pay
Joint A	Adhesive Referen	ced in Subse	ection 2.1.1			
Viscosity, 400 ° F (Pa•s)			3.0-3.4	2.5-2.9	2.0-2.4	≤1.9
ASTM D 3236	4.0-10.0	3.5-10.5	10.6-11.0	11.1-11.5	11.6-12.0	≥ 12.1
Cone Penetration, 77 ° F			54-56	51-53	48-50	≤ 47
ASTM D 5329	60-100	57-103	104-106	107-109	110-112	≥ 113
Flow, 140 ° F (mm) ASTM D 5329	≤ 5.0	≤ 5.5	5.6-6.0	6.1-6.5	6.6-7.0	≥ 7.1
Resilience, 77 ° F (%) ASTM D 5329	≥ 30	≥ 28	26-27	24-25	22-23	≤ 21
Tensile Adhesion, 77 ° F (%) ASTM D 5329	≥ 500	≥ 490	480-489	470-479	460-469	≤ 459
Softening Point, ° F AASHTO T 53	≥ 171	≥ 169	166-168	163-165	160-162	≤ 159
Ductility, 77 ° F (cm) ASTM D 113	≥ 30.0	≥ 29.0	28.0-28.9	27.0-27.9	26.0-26.9	≤ 25.9
Ductility, 39 ° F (cm) ASTM D 113	≥ 30.0	≥ 29.0	28.0-28.9	27.0-27.9	26.0-26.9	≤ 25.9

CodePay ItemPay Unit20071ECJoint AdhesiveLinear Foot

May 7, 2014

SPECIAL PROVISION FOR EMBANKMENT AT BRIDGE END BENT STRUCTURES

This Special Provision will apply when indicated on the plans or in the proposal. Section references herein are to the Department's Standard Specifications for Road and Bridge Construction, Current Edition.

1.0 DESCRIPTION. Construct a soil, granular, or rock embankment with soil, granular or cohesive pile core and place structure granular backfill, as the Plans require. Construct the embankment according to the requirements of this Special Provision, the Plans, Standard Drawing RGX 100 and 105, and the Standard Specifications, Current Edition.

2.0 MATERIALS.

- **2.1 Granular Embankment.** Conform to Subsection 805.10. When Granular Embankment materials are erodible or unstable according to Subsection 805.03.04, use the Special Construction Methods found in 3.2 of the Special Provision.
- **2.2 Rock Embankment.** Provide durable rock from roadway excavation that consists principally of Unweathered Limestone, Durable Shale (SDI equal to or greater than 95 according to KM 64-513), or Durable Sandstone.
- **2.3 Pile Core.** Provide a pile core in the area of the embankments where deep foundations are to be installed unless otherwise specified. The Pile Core is the zone indicated on Standard Drawings RGX 100 and 105 designated as Pile Core. Material control of the pile core area during embankment construction is always required. Proper Pile Core construction is required for installation of foundation elements such as drilled or driven piles or drilled shafts. The type of material used to construct the pile core is as directed in the plans or below. Typically, the pile core area will be constructed from the same material used to construct the surrounding embankment. Pile Core can be classified as one of three types:
- A) Pile Core Conform to Section 206 of the Standard Specifications. Provide pile core material consisting of the same material as the adjacent embankment except the material in the pile core area shall be free of boulders or particle sizes larger than 4 inches in any dimension or any other obstructions that may hinder pile driving operations. If the pile core material hinders pile driving operations, take the appropriate means necessary to reach the required pile tip elevation, at no expense to the Department.
- **B) Granular Pile Core.** Granular pile core is required only when specified in the plans. Select a gradation of durable rock to facilitate pile driving that conforms to Subsection 805.11. If granular pile core material hinders pile driving operations, take appropriate means necessary to reach the required pile tip elevation, at no expense to the Department.
- C) Cohesive Pile Core. Cohesive Pile Core is required only when specified in the plans. Conform to Section 206 of the Standard Specifications and use soil with at least 50 percent passing a No. 4 sieve having a minimum Plasticity Index (PI) of 10. In addition, keep the cohesive pile core free of boulders, larger than 4 inches in any dimension, or any other obstructions, which would interfere with drilling operations. If cohesive pile core material interferes with drilling operations, take appropriate means necessary to maintain

- 2.4 Structure Granular Backfill. Conform to Subsection 805.11
- **2.5 Geotextile Fabric.** Conform to Type I or Type IV in Section 214 and 843.

3.0 CONSTRUCTION.

3.1 General. Construct roadway embankments at end bents according to Section 206 and in accordance with the Special Provision, the Plans, and Standard Drawings for the full embankment section. In some instances, granular or rock embankment will be required for embankment construction for stability purposes, but this special provision does not prevent the use of soil when appropriate. Refer to the plans for specific details regarding material requirements for embankment construction.

Place and compact the pile core and structure granular backfill according to the applicable density requirements for the project. If the embankment and pile core are dissimilar materials (i.e., a granular pile core is used with a soil embankment or a cohesive pile core is used with a granular embankment), a Geotextile Fabric, Type IV, will be required between the pile core and embankment in accordance with Sections 214 and 843 of the Standard Specifications.

When granular or rock embankment is required for embankment construction, conform to the general requirements of Subsection 206.03.02 B. In addition, place the material in no greater than 2-foot loose lifts and compact with a vibrating smooth wheel roller capable of producing a minimum centrifugal force of 15 tons. Apply these requirements to the full width of the embankment for a distance of half the embankment height or 50 feet, whichever is greater, as shown on Standard Drawing RGX-105.

When using granular pile core, install 8-inch perforated underdrain pipe at or near the elevation of the original ground in the approximate locations depicted on the standard drawing, and as the Engineer directs, to ensure positive drainage of the embankment. Wrap the perforated pipe with a fabric of a type recommended by the pipe manufacturer.

After constructing the embankment, excavate for the end bent cap, drive piling, install shafts or other foundation elements, place the mortar bed, construct the end bent, and complete the embankment to finish grade according to the construction sequence shown on the Plans or Standard Drawings and as specified hereinafter.

Certain projects may require widening of existing embankments and the removal of substructures. Construct embankment according to the plans. Substructure removal shall be completed according to the plans and Section 203. Excavation may be required at the existing embankment in order to place the structure granular backfill as shown in the Standard Drawings.

After piles are driven or shafts installed (see design drawings), slope the bottom of the excavation towards the ends of the trench as noted on the plans for drainage. Using a separate pour, place concrete mortar, or any class concrete, to provide a base for forming and placing the cap. Place side forms for the end bent after the mortar has set sufficiently to support workmen and forms without being disturbed.

Install 4-inch perforated pipe in accordance with the plans and Standard Drawings. In the event slope protection extends above the elevation of the perforated pipe, extend the pipe through the slope protection.

After placing the end bent cap and achieving required concrete cylinder strengths, remove adjacent forms and fill the excavation with compacted structure granular backfill material (maximum 1' loose lifts) to the level of the berm prior to placing beams for the bridge. Place Type IV geotextile fabric between embankment material and structure granular backfill. After completing the end bent backwall, or after completing the span end

wall, place the compacted structure granular backfill (maximum 1' loose lifts) to subgrade elevation. If the original excavation is enlarged, fill the entire volume with compacted structure granular backfill (maximum 1' loose lifts) at no expense to the Department. Do not place backfill before removing adjacent form work. Place structure granular backfill material in trench ditches at the ends of the excavation. Place Geotextile Fabric, Type IV over the surface of the compacted structure granular backfill prior to placing aggregate base course.

Tamp the backfill with hand tampers, pneumatic tampers, or other means approved by the Engineer. Thoroughly compact the backfill under the overhanging portions of the structure to ensure that the backfill is in intimate contact with the sides of the structure.

Do not apply seeding, sodding, or other vegetation to the exposed granular embankment.

3.2 Special Construction Methods. Erodible or unstable materials may erode even when protected by riprap or channel lining; use the special construction method described below when using these materials.

Use fine aggregates or friable sandstone granular embankment at "dry land" structures only. Do not use them at stream crossings or locations subject to flood waters.

For erodible or unstable materials having 50 percent or more passing the No. 4 sieve, protect with geotextile fabric. Extend the fabric from the original ground to the top of slope over the entire area of the embankment slopes on each side of, and in front of, the end bent. Cover the fabric with at least 12 inches of non-erodible material.

For erodible or unstable materials having less than 50 percent passing a No. 4 sieve, cover with at least 12 inches of non-erodible material.

Where erodible or unstable granular embankment will be protected by riprap or channel lining, place Type IV geotextile fabric between the embankment and the specified slope protection.

4.0 MEASUREMENT.

4.1 Granular Embankment. The Department will measure the quantity in cubic yards using the plan quantity, increased or decreased by authorized adjustments as specified in Section 204. The Department will not measure for payment any Granular Embankment that is not called for in the plans.

The Department will not measure for payment any special construction caused by using erodible or unstable materials and will consider it incidental to the Granular Embankment regardless of whether the erodible or unstable material was specified or permitted.

- **4.2 Rock Embankment.** The Department will not measure for payment any rock embankment and will consider it incidental to roadway excavation or embankment in place, as applicable. Rock embankments will be constructed using granular embankment on projects where there is no available rock present within the excavation limits of the project.
- **4.3 Pile Core.** Pile core will be measured and paid under roadway excavation or embankment in place, as applicable. The Department will not measure the pile core for separate payment. The Department will not measure for payment the 8-inch perforated underdrain pipe and will consider it incidental to the Pile Core.
- 4.4 Structure Granular Backfill. The Department will measure the quantity in cubic yards using the plan quantity, increased or decreased by authorized adjustments as specified in Section 204. The Department will not measure any additional material required for backfill outside the limits shown on the Plans and Standard Drawings for payment and will

consider it incidental to the work.

The Department will not measure for payment the 4-inch perforated underdrain pipe and will consider it incidental to the Structure Granular Backfill.

4.5 Geotextile Fabric. The Department will not measure the quantity of fabric used for separating dissimilar materials when constructing the embankment and pile core and will consider it incidental to embankment construction.

The Department will not measure for payment the Geotextile Fabric used to separate the Structure Granular Backfill from the embankment and aggregate base course and will consider it incidental to Structure Granular Backfill.

The Department will not measure for payment the Geotextile Fabric required for construction with erodible or unstable materials and will consider it incidental to embankment construction.

- **4.6 End Bent.** The Department will measure the quantities according to the Contract. The Department will not measure furnishing and placing the 2-inch mortar or concrete bed for payment and will consider it incidental to the end bent construction.
- **4.7 Structure Excavation.** The Department will not measure structure excavation on new embankments for payment and will consider it incidental to the Structure Granular Backfill or Concrete as applicable.
- **5.0 PAYMENT.** The Department will make payment for the completed and accepted quantities under the following:

<u>Code</u>	Pay Item	Pay Unit
02223	Granular Embankment	Cubic Yards
02231	Structure Granular Backfill	Cubic Yards

The Department will consider payment as full compensation for all work required in this provision.

September 16, 2016

PART III

EMPLOYMENT, WAGE AND RECORD REQUIREMENTS

FHWA-1273 -- Revised May 1, 2012

REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

- I. General
- II. Nondiscrimination
- III. Nonsegregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
- Compliance with Governmentwide Suspension and Debarment Requirements
- Certification Regarding Use of Contract Funds for Lobbying

ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Form FHWA-1273 must be included in all Federal-aid designbuild contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services). The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in bid proposal or request for proposal documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

- 3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.
- 4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

II. NONDISCRIMINATION

The provisions of this section related to 23 CFR Part 230 are applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR 230, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

1. Equal Employment Opportunity: Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under

this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

- a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.
- b. The contractor will accept as its operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or on-the-job training."

- 2. EEO Officer: The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so
- 3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:
- a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.
- b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.
- c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.
- d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.
- e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

- **4. Recruitment:** When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.
- a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.
- b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.
- c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.
- **5. Personnel Actions:** Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:
- a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.
- b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.
- c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.
- d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are

applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

- b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).
- c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.
- d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.
- 7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:
- a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.
- b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.
- c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.
- d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.
- 8. Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar

with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established there under. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

- 9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.
- The contractor shall notify all potential subcontractors and suppliers and lessors of their EEO obligations under this contract.
- b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

10. Assurance Required by 49 CFR 26.13(b):

- a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.
- b. The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the contracting agency deems appropriate.
- 11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.
- a. The records kept by the contractor shall document the following:
- (1) The number and work hours of minority and nonminority group members and women employed in each work classification on the project;
 - (2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and
 - (3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women;
- b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form FHWA-1391. The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor

will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more.

The contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location, under the contractor's control, where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

1. Minimum wages

a. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions

of paragraph 1.d. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

- b.(1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:
 - (i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and
 - (ii) The classification is utilized in the area by the construction industry; and
 - (iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.
 - (2) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
 - (3) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. The Wage and Hour Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or

will notify the contracting officer within the 30-day period that additional time is necessary.

- (4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.
- c. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.
- d. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

2. Withholding

The contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract, or any other Federal contract with the same prime contractor, or any other federallyassisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the contracting agency may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

3. Payrolls and basic records

a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-

Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

- b.(1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at http://www.dol.gov/esa/whd/forms/wh347instr.htm or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency...
- (2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:
 - (i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;
 - (ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;
 - (iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

- (3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH–347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.
- (4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.
- c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and trainees

a. Apprentices (programs of the USDOL).

Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

b. Trainees (programs of the USDOL).

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

d. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

- **5. Compliance with Copeland Act requirements.** The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.
- **6. Subcontracts.** The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.
- **7. Contract termination: debarment.** A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.
- 8. Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.
- 9. Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of eligibility.

- a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

The following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

- 1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.
- 2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (1.) of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1.) of this section.
- 3. Withholding for unpaid wages and liquidated damages. The FHWA or the contacting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section.
- 4. Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System.

- 1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).
- a. The term "perform work with its own organization" refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:
- the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
- (2) the prime contractor remains responsible for the quality of the work of the leased employees;
- (3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and
- (4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.
- b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract.
- 2. The contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.
- 3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.
- 4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is

evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

VII. SAFETY: ACCIDENT PREVENTION

- This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.
- 1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.
- 2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).
- 3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C.3704).

VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

T h i s p r o v i s i o n i s applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

- 1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.
- 2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more – as defined in 2 CFR Parts 180 and 1200.

1. Instructions for Certification - First Tier Participants:

- a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.
- b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this

covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.

- c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default.
- d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
- e. The terms "covered transaction," "debarred,"
 "suspended," "ineligible," "participant," "person," "principal,"
 and "voluntarily excluded," as used in this clause, are defined
 in 2 CFR Parts 180 and 1200. "First Tier Covered
 Transactions" refers to any covered transaction between a
 grantee or subgrantee of Federal funds and a participant (such
 as the prime or general contract). "Lower Tier Covered
 Transactions" refers to any covered transaction under a First
 Tier Covered Transaction (such as subcontracts). "First Tier
 Participant" refers to the participant who has entered into a
 covered transaction with a grantee or subgrantee of Federal
 funds (such as the prime or general contractor). "Lower Tier
 Participant" refers any participant who has entered into a
 covered transaction with a First Tier Participant or other Lower
 Tier Participants (such as subcontractors and suppliers).
- f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.
- g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.
- h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (https://www.epls.gov/), which is compiled by the General Services Administration.

- i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

* * * * *

2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

- a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:
- Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;
- (2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- (3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and
- (4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
- b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

2. Instructions for Certification - Lower Tier Participants:

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200)

- a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.
- b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which

this transaction originated may pursue available remedies, including suspension and/or debarment.

- c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.
- d. The terms "covered transaction," "debarred,"
 "suspended," "ineligible," "participant," "person," "principal,"
 and "voluntarily excluded," as used in this clause, are defined
 in 2 CFR Parts 180 and 1200. You may contact the person to
 which this proposal is submitted for assistance in obtaining a
 copy of those regulations. "First Tier Covered Transactions"
 refers to any covered transaction between a grantee or
 subgrantee of Federal funds and a participant (such as the
 prime or general contract). "Lower Tier Covered Transactions"
 refers to any covered transaction under a First Tier Covered
 Transaction (such as subcontracts). "First Tier Participant"
 refers to the participant who has entered into a covered
 transaction with a grantee or subgrantee of Federal funds
 (such as the prime or general contractor). "Lower Tier
 Participant" refers any participant who has entered into a
 covered transaction with a First Tier Participant or other Lower
 Tier Participants (such as subcontractors and suppliers).
- e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
- f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.
- g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (https://www.epls.gov/), which is compiled by the General Services Administration.
- h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the

department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

* * * * *

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

- 1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.
- 2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

* * * * *

XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 (49 CFR 20).

- 1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:
- a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- 2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.
- 3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

ATTACHMENT A - EMPLOYMENT AND MATERIALS PREFERENCE FOR APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS ROAD CONTRACTS

This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

- 1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:
- a. To the extent that qualified persons regularly residing in the area are not available.
- b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.
- c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.
- 2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.
- 3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.
- 4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.
- 5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

KENTUCKY TRANSPORTATION CABINET DEPARTMENT OF HIGHWAYS

EMPLOYMENT REQUIREMENTS RELATING TO NONDISCRIMINATION OF EMPLOYEES (APPLICABLE TO FEDERAL-AID SYSTEM CONTRACTS)

AN ACT OF THE KENTUCKY GENERAL ASSEMBLY TO PREVENT DISCRIMINATION IN EMPLOYMENT

KRS CHAPTER 344 EFFECTIVE JUNE 16, 1972

The contract on this project, in accordance with KRS Chapter 344, provides that during the performance of this contract, the contractor agrees as follows:

- 1. The contractor shall not fail or refuse to hire, or shall not discharge any individual, or otherwise discriminate against an individual with respect to his compensation, terms, conditions, or privileges of employment, because of such individual's race, color, religion, national origin, sex, disability or age (between forty and seventy); or limit, segregate, or classify his employees in any way which would deprive or tend to deprive an individual of employment opportunities otherwise adversely affect his status as an employee, because of such individual's race, color, religion, national origin, sex, disability or age (between forty and seventy). The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.
- 2. The contractor shall not print or publish or cause to be printed or published a notice or advertisement relating to employment by such an employer or membership in or any classification or referral for employment by the employment agency, indicating any preference, limitation, specification, or discrimination, based on race, color, religion, national origin, sex, disability or age (between forty and seventy), except that such notice or advertisement may indicate a preference, limitation, or specification based on religion, or national origin when religion, or national origin is a bona fide occupational qualification for employment.
- 3. If the contractor is in control of apprenticeship or other training or retraining, including on-the-job training programs, he shall not discriminate against an individual because of his race, color, religion, national origin, sex, disability or age (between forty and seventy), in admission to, or employment in any program established to

provide apprenticeship or other training.

4. The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representative of the contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment. The contractor will take such action with respect to any subcontract or purchase order as the administrating agency may direct as a means of enforcing such provisions, including sanctions for non-compliance.

REVISED: 12-3-92

Standard Title VI/Non-Discrimination Assurances

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees as follows:

- Compliance with Regulations: The contractor (hereinafter includes consultants) will comply with the Acts
 and the Regulations relative to Non-discrimination in Federally-assisted programs of the U.S. Department of
 Transportation, Federal Highway Administration, as they may be amended from time to time, which are
 herein incorporated by reference and made a part of this contract.
- 2. **Non-discrimination:** The contractor, with regard to the work performed by it during the contract, will_not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor will not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR Part 21.
- 3. Solicitations for Subcontracts, Including Procurements of Materials and Equipment: In all solicitations, either by competitive bidding, or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the contractor of the contractor's obligations under this contract and the Acts and the Regulations relative to Non-discrimination on the grounds of race, color, or national origin.
- 4. **Information and Reports:** The contractor will_provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Recipient or the **Federal Highway Administration** to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the contractor will so certify to the Recipient or the **Federal Highway Administration**, as appropriate, and will set forth what efforts it has made to obtain the information.
- 5. **Sanctions for Noncompliance:** In the event of a contractor's noncompliance with the Non-discrimination provisions of this contract, the Recipient will impose such contract sanctions as it or the **Federal Highway Administration** may determine to be appropriate, including, but not limited to:
 - a. withholding payments to the contractor under the contract until the contractor complies; and/or
 - b. cancelling, terminating, or suspending a contract, in whole or in part.
- 6. **Incorporation of Provisions:** The contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The contractor will take action with respect to any subcontract or procurement as the Recipient or the **Federal Highway Administration** may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the contractor may request the Recipient to enter into any litigation to protect the interests of the Recipient. In addition, the contractor may request the United States to enter into the litigation to protect the interests of the United States.

Standard Title VI/Non-Discrimination Statutes and Authorities

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d *et seq.*, 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin); and 49 CFR Part 21;
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Federal-Aid Highway Act of 1973, (23 U.S.C. § 324 *et seq.*), (prohibits discrimination on the basis of sex);
- Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 *et seq.*), as amended, (prohibits discrimination on the basis of disability); and 49 CFR Part 27;
- The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 *et seq.*), (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982, (49 USC § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131 -- 12189) as implemented by Department of Transportation regulations at 49 C.F.R. parts 37 and 38;
- The Federal Aviation Administration's Non-discrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures non-discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. 1681 et seq).

EXECUTIVE BRANCH CODE OF ETHICS

In the 1992 regular legislative session, the General Assembly passed and Governor Brereton Jones signed Senate Bill 63 (codified as KRS 11A), the Executive Branch Code of Ethics, which states, in part:

KRS 11A.040 (6) provides:

No present or former public servant shall, within six (6) months of following termination of his office or employment, accept employment, compensation or other economic benefit from any person or business that contracts or does business with the state in matters in which he was directly involved during his tenure. This provision shall not prohibit an individual from returning to the same business, firm, occupation, or profession in which he was involved prior to taking office or beginning his term of employment, provided that, for a period of six (6) months, he personally refrains from working on any matter in which he was directly involved in state government. This subsection shall not prohibit the performance of ministerial functions, including, but not limited to, filing tax returns, filing applications for permits or licenses, or filing incorporation papers.

KRS 11A.040 (8) states:

A former public servant shall not represent a person in a matter before a state agency in which the former public servant was directly involved, for a period of one (1) year after the latter of:

- a) The date of leaving office or termination of employment; or
- b) The date the term of office expires to which the public servant was elected.

This law is intended to promote public confidence in the integrity of state government and to declare as public policy the idea that state employees should view their work as a public trust and not as a way to obtain private benefits.

If you have worked for the executive branch of state government within the past six months, you may be subject to the law's prohibitions. The law's applicability may be different if you hold elected office or are contemplating representation of another before a state agency.

Also, if you are affiliated with a firm which does business with the state and which employs former state executive-branch employees, you should be aware that the law may apply to them.

In case of doubt, the law permits you to request an advisory opinion from the Executive Branch Ethics Commission, Room 136, Capitol Building, 700 Capitol Avenue, Frankfort, Kentucky 40601; telephone (502) 564-7954.

KENTUCKY TRANSPORTATION CABINET DEPARTMENT OF HIGHWAYS

TRAINING SPECIAL PROVISIONS

This Training Special Provision supersedes subparagraph 7b of the Special Provision entitled "Specific Equal Employment Opportunity Responsibilities," (Attachment 1), and is in implementation of 23 U.S.C. 140(a).

As part of the contractor's equal employment opportunity affirmative action program training shall be provided as follows:

The contractor shall provide on-the-job training aimed at developing full journeymen in the type of trade or job classification involved.

The number of trainees to be trained under these special provisions and in this contract is shown in "Special Notes Applicable to Project" in the bid proposal.

In the event that a contractor subcontracts a portion of the contract work, he shall determine how many, if any, of the trainees are to be trained by the subcontractor, provided, however, that the contractor shall retain the primary responsibility for meeting the training requirements imposed by this special provision. The contractor shall also insure that this training special provision is made applicable to such subcontract. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training.

The number of trainees shall be distributed among the work classifications on the basis of the contractor's needs and the availability of journeymen in the various classifications within a reasonable area of recruitment. Prior to commencing construction the contractor shall submit to the Kentucky Transportation Cabinet, Department of Highways for its approval, an acceptable training program on forms provided by the Cabinet indicating the number of trainees to be trained in each selected classification. Failure to provide the Cabinet with the proper documentation evidencing an acceptable training program prior to commencing construction shall cause the Cabinet to suspend the operations of the contractor with (if applicable) working days being charged as usual against the contract time or (if applicable), no additional contract time being granted for the suspension period. The Cabinet will not be liable for the payment of any work performed during the suspension period due to the failure of the contractor to provide an acceptable training program. Said suspension period shall be terminated when an acceptable training program is received by the Cabinet. Furthermore, the contractor shall specify the starting time for training in each of the classifications. The contractor will be credited for each trainee employed by him on the contract work who is currently enrolled or becomes enrolled in an approved program and will be reimbursed for such trainees as provided hereinafter.

Training and upgrading of minorities and women toward journeymen status is a primary objective of this Training Special Provision. Accordingly, the contractor shall make every effort to enroll minority trainees and women (e.g., by conducting systematic and direct recruitment through public and private sources likely to yield minority and women trainees) to the extent that such persons are available within a reasonable area of recruitment. The contractor will be responsible for demonstrating the steps that he has taken in pursuance thereof, prior to a determination as to whether the contractor is in compliance with this Training Special Provision. This training commitment is not intended, and shall not be used, to discriminate against any applicant for training, whether a member of a minority group or not.

No employee shall be employed as a trainee in any classification in which he has successfully completed a training course leading to journeyman status or in which he has been employed as a journeyman. The contractor should satisfy this requirement by including appropriate questions in the employee application or by other suitable means. Regardless of the method used the contractor's records should document the findings in each case. The minimum length and type of training for each classification will be as established in the training program selected by the contractor and approved by the Kentucky Transportation Cabinet, Department of Highways and the Federal Highway Administration shall approve a program if it is reasonably calculated to meet the equal employment opportunity obligations of the contractor and to qualify the average trainee for journeyman status in the classification concerned by the end of the training period. Furthermore, apprenticeship programs

registered with the U.S. Department of Labor, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau and training programs approved but not necessarily sponsored by the U.S. Department of Labor, Manpower Administration, Bureau of Apprenticeship and Training shall also be considered acceptable provided it is being administered in a manner consistent with the equal employment obligations of Federal-aid highway construction contracts. Approval or acceptance of a training program shall be obtained from the State prior to commencing work on the classification covered by the program. It is the intention of these provisions that training is to be provided in the construction crafts rather than clerk-typists or secretarial-type positions. Training is permissible in lower level management positions such as office engineers, estimators, timekeepers, etc., where the training is oriented toward construction applications. Training in the laborer classification may be permitted provided that significant and meaningful training is provided and approved by the division office. Some offsite training is permissible as long as the training is an integral part of an approved training program and does not comprise a significant part of the overall training.

Except as otherwise noted below, the contractor will be reimbursed for each hour of training given an employee on this contract in accordance with an approved training program. As approved by the engineer, reimbursement will be made for training persons in excess of the number specified herein. This reimbursement will be made even though the contractor receives additional training program funds from other sources, provided such other source does not specifically prohibit the contractor from receiving other reimbursement. Reimbursement for offsite training indicated above may only be made to the contractor where he does one or more of the following and the trainees are concurrently employed on a Federal-aid project; contributes to the cost of the training, provides the instruction to the trainee or pays the trainee's wages during the offsite training period.

No payment shall be made to the contractor if either the failure to provide the required training, or the failure to hire the trainee as a journeyman, is caused by the contractor and evidences a lack of good faith on the part of the contractor in meeting the requirements of this Training Special Provision. It is normally expected that a trainee will begin his training on the project as soon as feasible after start of work utilizing the skill involved and remain on the project as long as training opportunities exist in his work classification or until he has completed his training program. It is not required that all trainees be on board for the entire length of the contract. A contractor will have fulfilled his responsibilities under this Training Special Provision if he has provided acceptable training to the number of trainees specified. The number trained shall be determined on the basis of the total number enrolled on the contract for a significant period.

Trainees will be paid at least 60 percent of the appropriate minimum journeyman's rate specified in the contract for the first half of the training period, 75 percent for the third quarter of the training period, and 90 percent for the last quarter of the training period, unless apprentices or trainees in an approved existing program are enrolled as trainees on this project. In that case, the appropriate rates approved by the Departments of Labor or Transportation in connection with the existing program shall apply to all trainees being trained for the same classification who are covered by this Training Special Provision.

The contractor shall furnish the trainee a copy of the program he will follow in providing the training. The contractor shall provide each trainee with a certification showing the type and length of training satisfactorily completed.

The contractor will provide for the maintenance of records and furnish periodic reports documenting his performance under this Training Special Provision.

General Decision Number: KY160187 01/08/2016 KY187

Superseded General Decision Number: KY20150187

State: Kentucky

Construction Type: Highway

Counties: Adair, Barren, Bell, Breathitt, Casey, Clay, Clinton, Cumberland, Estill, Floyd, Garrard, Green, Harlan, Hart, Jackson, Johnson, Knott, Knox, Laurel, Lawrence, Lee, Leslie, Letcher, Lincoln, Magoffin, Martin, McCreary, Menifee, Metcalfe, Monroe, Morgan, Owsley, Perry, Pike, Powell, Pulaski, Rockcastle, Russell, Taylor, Wayne, Whitley and Wolfe Counties in Kentucky.

HIGHWAY CONSTRUCTION PROJECTS

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.15 for calendar year 2016 applies to all contracts subject to the Davis-Bacon Act for which the solicitation was issued on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.15 (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2016. The EO minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number Publication Date 0 01/08/2016

SUKY2015-047 10/20/2015

	Rates	Fringes
BOILERMAKER	.\$ 24.65	12.94
BRICKLAYER Bricklayer Stone Mason		8.50 8.50
CARPENTER Carpenter Piledriver		14.50 14.50
CEMENT MASON	.\$ 21.25	8.50
ELECTRICIAN Electrician Equipment Operator Groundsman Lineman	.\$ 26.90 .\$ 17.79 .\$ 30.09	10.55 10.31 8.51 10.94
When workmen are required to w	ork from bosu	ım chairs, trusses,

stacks, tanks, scaffolds, catwalks, radio and T.V. towers,

structural steel (open, unprotected, unfloored raw steel), and bridges or similar hazardous locations where workmen are subject to fall, except where using JLG's and bucket trucks up to 75 feet: Add 25% to workman's base rate for 50 to 75 feet, and add 50% to workman's base rate for over 75 feet.

LABORER

Group 1\$	21.80	12.36
Group 2\$	22.05	12.36
Group 3\$	22.10	12.36
Group 4\$	22.70	12.36

GROUP 1: Aging and Curing of Concrete (Any Mode or Method), Asbestos Abatement Worker, Asphalt Plant Laborers, Asphalt Laborers, Batch Truck Dumpers, Carpenter Tenders, Cement Mason Tenders, Cleaning of Machines, Concrete Laborers, Demolition Laborers, Dredging Laborers, Drill Tender, Environmental Laborer - Nuclear, Radiation, Toxic and Hazardous Waste - Level D, Flagmen, Grade Checkers, All Hand Digging and Hand Back Filling, Highway Marker Placers, Landscaping Laborers, Mesh Handlers and Placers, Puddler, Railroad Laborers, Rip-rap and Grouters, Right of Way Laborers, Sign, Guard Rail and Fence Installers (All Types), Signalmen, Sound Barrier Installer, Storm and Sanitary Sewer Laborers, Swampers, Truck Spotters and Dumpers, Wrecking of Concrete Forms, General Cleanup

GROUP 2: Batter Board Men (Sanitary and Storm Sewer),
Brickmason Tenders, Mortar Mixer Operator, Scaffold Builders,
Burner and Welder, Bushammers, Chain Saw Operator, Concrete
Saw Operators, Deckhand Scow Man, Dry Cement Handlers,
Environmental Laborers - Nuclear, Radiation, Toxic and
Hazardous Waste - Level C, Forklift Operators for Masonry,
Form Setters, Green Concrete Cutting, Hand Operated Grouter
and Grinder Machine Operator, Jack Hammers, Lead Paint
Abatement, Pavement Breakers, Paving Joint Machine, Pipe
Layers - Laser Operators (Non-metallic), Plastic Pipe Fusion,
Power Driven Georgia Buggy and Wheel Barrow, Power Post Hole
Diggers, Precast Manhole Setters, Walk-behind Tampers, Walkbehind Trenchers, Sand Blasters, Concrete Chippers, Surface
Grinders, Vibrator Operators, Wagon Drillers

GROUP 3: Air Track Driller (All Types), Asphalt Luteman and Rakers, Gunnite Nozzleman, Gunnite Operators and Mixers, Grout Pump Operator, Powderman and Blaster, Side Rail Setters, Rail Paved Ditches, Screw Operators, Tunnel Laborers (Free Air), Water Blasters

GROUP 4: Caisson Workers (Free Air), Cement Finishers, Environmental Laborer - Nuclear, Radiation, Toxic and Hazardous Waste - Level A and B, miners and Drillers (Free Air), Tunnel Blasters, and Tunnel Mockers (Free Air), Directional and Horizontal Boring, Air Track Drillers (All Types), Powder Man and Blasters, Troxler and Concrete Tester if Laborer is Utilized

PAINTER

All Excluding Bridges\$	19.92	9.57
Bridges\$	23.92	10.07

PLUMBER\$ 22.52	7.80		
POWER EQUIPMENT OPERATOR:			
Group 1	wer), Concrete Boat, Ditching Boat, Ditching Beer, Elevator Ing any building Loaders, Hoe-type Beau or Carry-all Independent of the concept o		
GROUP 2: All Air Compressors (200 cu ft/min o Bituminous Mixer, Concrete Mixer (21 cu. ft. Machine, Form Grader, Tractor (50 hp and over Finish Machine, Outboard Motor Boat, Brakeman Tender, Whirly Oiler, Tract-air, Road Widenin Articulating Trucks	or over), Welding (), Bull Float, (), Mechanic		
GROUP 3: Greaser on Grease Facilities servici Equipment	ng Heavy		
GROUP 4: Bituminous Distributor, Cement Gun, Conveyor, Mud Jack, Paving Joint Machine, Pump, Tamping Machine, Tractor (under 50 hp), Vibrator, Oiler, Air Compressor (under 200 cu ft per minute), Concrete Saw, Burlap and Curing Machine, Hydro Seeder, Power Form Handling Equipment, Deckhand Oiler, Hydraulic Post Driver			
SHEET METAL WORKER\$ 20.40	7.80		
TRUCK DRIVER Driver (3 Tons and Over), Driver (Truck Mounted Rotary Drill)\$ 23.74 Driver (3 Tons and Under),	14.50		
Tire Changer and Truck Mechanic Tender\$ 23.53 Driver (Semi-Trailer or Pole Trailer), Driver	14.50		
(Dump Truck, Tandem Axle), Driver of Distributor\$ 23.40 Driver on Mixer Trucks	14.50		

(All Types)\$ Driver on Pavement Breakers.\$ Driver, Euclid and Other Heavy Earth Moving		14.50 14.50
Equipment and Low Boy\$ Driver, Winch Truck and A- Frame when used in	24.31	14.50
Transporting Materials\$ Greaser on Greasing	23.30	14.50
Facilities\$	24.40	14.50
Truck Mechanic\$	23.50	14.50
Truck Tender and		
Warehouseman\$	23.20	14.50

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

- 1.) Has there been an initial decision in the matter? This can be:
- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal

process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations Wage and Hour Division U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

END OF GENERAL DECISION

Fringe benefit amounts are applicable for all hours worked except when otherwise noted.

These rates are listed pursuant to the Kentucky Determination No. CR-16-II- HWY dated July 1, 2016.

<u>NOTE:</u> Both Kentucky Determination No. CR-16-II-HWY and Federal Decision No. KY150187 apply to this project. Both sets of wage rates are included. If there is a difference in the two wages for the same classification, the Contractor is required to pay the higher of the two listed wages.

No laborer, workman or mechanic shall be paid at a rate less than that of a Journeyman except those classified as bona fide apprentices.

Apprentices or trainees shall be permitted to work as such subject to Administrative Regulations adopted by the Commissioner of Workplace Standards. Copies of these regulations will be furnished upon request from any interested person.

Before using apprentices on the job the contractor shall present to the Contracting Officer written evidence of registration of such employees in a program of a State apprenticeship and training agency approved and recognized by the U. S. Bureau of Apprenticeship and Training. In the absence of such a State agency, the contractor shall submit evidence of approval and registration by the U. S. Bureau of Apprenticeship and Training.

The contractor shall submit to the Contracting Officer, written evidence of the established apprenticeship-journeyman ratios and wage rates in the project area, which will be the basis for establishing such ratios and rates for the project under the applicable contract provisions.

TO: EMPLOYERS/EMPLOYEES

PREVAILING WAGE SCHEDULE:

The wages indicated on this wage schedule are the least permitted to be paid for the occupations indicated. When an employee works in more than one classification, the employer must record the number of hours worked in each classification at the prescribed hourly base rate.

OVERTIME:

Overtime is to be paid after an employee works eight (8) hours a day or forty (40) hours a week, whichever gives the employee the greater wages. At least time and one-half the base rate is required for all overtime. A laborer, workman or mechanic and an employer may enter into a written agreement or a collective bargaining agreement to work more than eight (8) hours a calendar day but not more than ten (10) hours a calendar day for the straight time hourly rate. Wage violations or questions should be directed to the designated Engineer or the undersigned.

Director Division of Construction Procurement Frankfort, Kentucky 40622 502-564-3500 ROCKCASTLE COUNTY NHPP IM 0753 (092) Contract ID: 161270 Page 157 of 172

KENTUCKY LABOR CABINET PREVAILING WAGE DETERMINATION CURRENT REVISION HIGHWAY CONSTRUCTION LOCALITY NO. II

Determination No. CR-16-II-HWY

Project No. Highway

Date of Determination: July 1, 2016

This schedule of the prevailing rate of wages for Locality No. II including the counties of ADAIR, BARREN, BELL, BREATHITT, CASEY, CLAY, CLINTON, CUMBERLAND, ESTILL, FLOYD, GARRARD, GREEN, HARLAN, HART, JACKSON, JOHNSON, KNOTT, KNOX, LAUREL, LAWRENCE, LEE, LESLIE, LETCHER, LINCOLN, MCCREARY, MAGOFFIN, MARTIN, MENIFEE, METCALFE, MONROE, MORGAN, OWSLEY, PERRY, PIKE, POWELL, PULASKI, ROCKCASTLE, RUSSELL, TAYLOR, WAYNE, WHITLEY, and WOLFE has been determined in accordance with the provisions of KRS 337.505 to 337.550. This determination shall be referred to as Prevailing Wage Determination No. CR-15-II-HWY.

The following schedule of rates is to be used for highway construction projects advertised or awarded by the <u>Kentucky Transportation Cabinet</u>. This includes any contracts for the relocation of any utilities or other incidental construction projects advertised or awarded by public authorities as a result of the highway construction project.

Apprentices or trainees shall be permitted to work in accordance with Administrative Regulations. Copies of these regulations will be furnished upon request to any interested person.

Overtime is to be computed at not less than one and one-half (1 1/2) times the indicated BASE RATE for all hours worked in excess of eight (8) hours per day, or in excess of forty (40) hours per week. However, KRS 337.540 permits an employee and employer to agree, in writing, that the employee will be compensated at a straight time base rate for hours worked in excess of eight (8) hours in any one calendar day, but not more than ten (10) hours worked in any one calendar day, if such written agreement is prior to the over eight (8) hours in a calendar day actually being worked, or where provided for in a collective bargaining agreement. The fringe benefit rate is to be paid for each hour worked at a straight time rate for all hours worked. Fringe benefit amounts are applicable for all hours worked except when otherwise noted. Welders will receive rate for craft in which welding is incidental.

No laborer, workman or mechanic shall be paid at a rate less than that of the General Laborer except those classified as bona fide apprentices registered with the Kentucky State Apprenticeship Supervisor unless otherwise specified in this schedule of wage rates.

Ervin Dimeny, Commissioner

Department of Workplace Standards

CLASSIFICATIONS	RATE AND FRINGE BENEFITS
BOILERMAKERS:	BASE RATE \$24.65 FRINGE BENEFIT 12.94
BRICKLAYERS: Bricklayers: 8.50	BASE RATE \$22.90 FRINGE BENEFITS
Stone Mason:	BASE RATE \$21.50 FRINGE BENEFITS 8.50
- CARPENTERS: Carpenters:	BASE RATE \$24.90 FRINGE BENEFITS 14.50
Piledrivers:	BASE RATE \$24.55 FRINGE BENEFITS 14.50
CEMENT MASONS:	BASE RATE \$21.25 FRINGE BENEFITS 8.50
 ELECTRICIANS:	*BASE RATE \$29.36 FRINGE BENEFITS 10.55
*When workmen are required to work from bosum chairs, trusses, staradio and T.V. towers, structural steel (open, unprotected, unfloored hazardous locations where workmen are subject to a direct fall, exceptrucks up to 75 feet: Add 25% to workman's base rate for 50 to 75 feet base rate for over 75 feet.	raw steel), and bridges or similar ot where using JLG's and bucket
LINEMAN:	*BASE RATE \$30.09 FRINGE BENEFITS 10.94
EQUIPMENT OPERATOR:	*BASE RATE \$26.90 FRINGE BENEFITS 10.31
GROUNDSMAN:	*BASE RATE \$17.79 FRINGE BENEFITS 8.51
IRONWORKERS:	BASE RATE \$ 27.91 FRINGE BENEFITS 22.00

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<u>CLASSIFICATIONS</u>

RATE AND FRINGE

BENEFITS

LABORERS:

GROUP 1: Aging and curing of concrete (any mode or method), asbestos abatement worker, asphalt plant laborers, asphalt laborers; batch truck dumpers; carpenter tenders, cement mason tenders, cleaning of machines, concrete laborers, demolition laborers, dredging laborers, drill helper, environmental laborer - nuclear, radiation, toxic and hazardous waste – Level D, flagmen, grade checkers, all hand digging and hand back filling, highway marker placers, landscaping laborers, mesh handlers and placers, puddler, railroad laborers, rip-rap and grouters, right of way laborers, sign, guard rail and fence installers (all types), signalmen, sound barrier installer, storm and sanitary sewer laborers, swampers, truck spotters and dumpers, wrecking of concrete forms, general cleanup, tending of setting precast concrete products, applying sealer, epoxies, coating, curing compounds, cure and seal products and preparation on all services of concrete wall expansion materials:

BASE RATE \$22.75 FRINGE BENEFITS 12.00

GROUP 2: Batter board men (sanitary and storm sewer), brickmason tenders, mortar mixer operator, scaffold builders, burner and welder, bushammers, chain saw operator, concrete saw operators, deckhand scow man, dry cement handlers, environmental laborers – nuclear, radiation, toxic and hazardous waste – Level C, forklift operators for masonry, form setters, green concrete cutting, hand operated grouter and grinder machine operator, jack hammers, lead paint abatement, pavement breakers, paving joint machine, pipe layers – laser operators (non-metallic), plastic pipe fusion, power driven Georgia buggy and wheel barrow, power post hole diggers, precast manhole setters, walk-behind tampers, walk-behind trenchers, sand blasters, concrete chippers, surface grinders, vibrator operators, wagon drillers:

BASE RATE \$23.00 FRINGE BENEFITS 12.00

GROUP 3: Air track driller (all types), asphalt luteman and rakersm gunnite nozzleman, gunnite operators and mixers, grout pump operator, powderman and blaster, side rail setters, rail paved ditches, screw operators, tunnel laborers (free air), and water blasters, remote control compactors, air lifting, dewatering, water pumps and asphalt sealer applicator:

BASE RATE \$23.05 FRINGE BENEFITS 12.00

GROUP 4: Caisson workers (free air), cement finishers, environmental laborer – nuclear, radiation, toxic and hazardous waste – Level A and B, miners and drillers (free air), tunnel blasters, and tunnel mockers (free air), directional and horizontal boring, air track drillers (all types), powder man and blasters, troxler and concrete tester if laborer is utilized, concrete vibrator, tv inspection, cleaning tech, GPS tech if performed by a laborer:

BASE RATE	\$23.65
FRINGE BENEFITS	12.00

ROCKCASTLE COUNTY NHPP IM 0753 (092)

<u>CLASSIFICATIONS</u>
RATE AND FRINGE

BENEFITS

OPERATING ENGINEERS:

CLASS A-1:

NCCCO or OECP Certified or US Coast Guard approved Boat Pilot License; Crane, dragline, hoist (1 drum when used for stack or chimney construction or repair), hoisting engineer (2 or more drums), orangepeel, overhead crane, piledriver, truck crane, tower crane, hydraulic crane, cableway, carry deck, cherry picker, clamshell, derrick, derrick boat, hydraulic boom truck, licensed boat pilot, rough terrain crane, tower cranes (French, German & other types), truck crane:

BASE RATE \$32.21 FRINGE BENEFITS 15.00

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CLASS A:

A-Frame winch truck, auto patrol, backfiller, batcher plant, bituminous paver, bituminous transfer machine, all types of boom cats, bulldozer, cableway, carry-all scoop, carry deck crane, central compressor plant operator, cherry picker, clamshell, concrete mixer (21 cu. Ft. or over), concrete paver, truck mounted concrete pump, core drills, crane, crusher plant, derrick, derrick boat, ditching and trenching machine, dragline, dredge operator, dredge engineer, earth movers, elevating grader and all types of loaders, grade-all gurries, heavy equipment robotics operator/mechanic, high lift, hoe type machine, hoist (2 drums or more), hoisting engine, (2 or more drums), horizontal directional drill, hydraulic boom truck, hydrocrane, hyster, KeCal loader, Letourneau, locomotive, mechanic, mechanically operated laser screed, mechanic welder, mucking machine, motor scraper, orange-peel bucket, overhead crane, piledriver, power blade, pumpcrete, push dozer, rock spreader attached to equipment, all rotary drills, roller (bituminous), rough terrain crane, scarifier, scoopmobile, shovel, side boom, subgrader, tailboom, telescoping type forklift, tow or push boat, tower cranes (French, German and other types), tractor shovel and truck crane, tunnel mining machines including moles, shields or similar types of tunnel mining equipment, self-propelled modular transporter, hydro excavator, micro pile machine, remote controlled demolition equipment, milling machine, track hoe, rubber tire back hoe, reclaimer/stabilizer:

BASE RATE \$31.05 FRINGE BENEFITS 15.00

Group B:

All air compressors (over 900 cu. ft. per min), bituminous mixer, boom type tamping machine, bull float, concrete mixer (under 21 cu ft), dredge engineer, electric vibrator compactor/self-propelled compactor, elevator (on drum or buck hoist), finish machine, firemen, flexplane, forklift (regardless of lift height), form grader, hoist (one drum), joint sealing machine, mechanic helper, outboard motor boat, power sweeper (riding type), roller (rock), ross carrier, skid mounted or trailer mounted concrete pumps, skid steer machine with all attachments, switchman or b5rakeman, throttle valve man, tract air and road widening trencher, tractor (50 hp and over), truck crane oiler, tugger, welding machine, well points, whirley oiler, water pull/water truck when used for compacting:

BASE RATE \$28.28 FRINGE BENEFITS 15.00

Group B2:

Greaser on grease facilities servicing heavy equipment, all off road material handling equipment, including articulating dump trucks:

BASE RATE \$28.71 FRINGE BENEFITS 15.00

CLASSIFICATIONS RATE AND FRINGE

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BENEFITS

OPERATING ENGINEERS (CONTINUED):

Group C:

SHEET METAL:

Bituminous distributor, cement gun, conveyor, mud jack, paving joint machine, pump, tamping machine, tractors (under 50 H.P.), vibrator, oiler, air compressors (under 200 cu. ft. per min. capacity), concrete saw,

burlap and curing machine, hydro seeder, power form handling equipment, deckhand oiler, hydraulic post driver, caisson drill and core drill helper (track or skid mounted), concrete saw, paving joint machine, roller (earth), steermen, tractors (under 50 hp):

BASE RATE \$27.97 FRINGE BENEFITS 15.00

Operators on cranes with booms 150 ft. and over including jib shall receive \$1.00 above Class A-1 or Class A rate; 250 ft. and over including jib shall receive \$1.00 above Class A-1 or Class A rate. All cranes with the length of the boom in combination with length of the piling leads equals or exceeds 150 ft. shall receive \$1.00 above Class A-1 or Class A.

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PAINTERS:		
Brush & Roller:	BASE RATE FRINGE BENEFITS	\$24.74 9.54
Spray:	BASE RATE FRINGE BENEFITS	\$25.24 9.54
Sand Blasting & Hopper Tender: \$24.49	BASE RATE FRINGE BENEFITS	9.54
Bridges (when highest point of clearance is 60 feet or more):	BASE RATE FRINGE BENEFITS	\$24.99 9.54
Sand Blasting, Hopper Tender (bridges when highest point of clearance is	60 feet or more): BASE RATE FRINGE BENEFITS	\$25.49 9.54
Bridge/Equipment Tender and or Containment Builder:	BASE RATE FRINGE BENEFITS	\$21.33 9.54
Bridge Quality Control:	BASE RATE FRINGE BENEFITS	\$16.45 9.54
Lead Abatement:	BASE RATE FRINGE BENEFITS	\$24.99 9.54
PLUMBERS:	BASE RATE FRINGE BENEFITS	\$22.52 7.80

CR-16-II-HWY July 1, 2016

BASE RATE

\$20.40

FRINGE BENEFITS 7.80

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CLASSIFICATIONS	RATE	AND	FRINGE
BENEFITS			

TRUCK DRIVERS:	
Truck helper and warehouseman:	BASE RATE \$23.20 FRINGE BENEFITS 14.50
Driver, winch truck and A-Frame when used in transporting materials:	BASE RATE \$23.30 FRINGE BENEFITS 14.50
Driver, (semi-trailer or pole trailer), driver (dump truck, tandem axle), driver of distributor:	BASE RATE \$23.40 FRINGE BENEFITS 14.50
Driver on mixer trucks (all types):	BASE RATE \$23.45 FRINGE BENEFITS 14.50
Truck mechanic:	BASE RATE \$23.50 FRINGE BENEFITS 14.50
Driver (3 tons and under), tire changer and truck mechanic helper:	BASE RATE \$23.53 FRINGE BENEFITS 14.50
Driver on pavement breakers:	BASE RATE \$23.55 FRINGE BENEFITS 14.50
Driver (over 3 tons), driver (truck mounted rotary drill):	BASE RATE \$23.74 FRINGE BENEFITS 14.50
Driver, Euclid and other heavy earth moving equipment and Low Boy:	BASE RATE \$24.31 FRINGE BENEFITS 14.50
Greaser on greasing facilities:	BASE RATE \$24.40 FRINGE BENEFITS 14.50

END OF DOCUMENT

Kentucky Determination No. CR-16-II-HWY dated July 1, 2016

Fringe benefit amounts are applicable for all hours worked except when otherwise noted.

No laborer, workman or mechanic shall be paid at a rate less than that of the General Laborer except those classified as bona fide apprentices registered with the Kentucky State Apprenticeship Supervisor unless otherwise specified in this schedule of wage rates.

These rates are listed pursuant to the Kentucky Determination No. CR-16-II-HWY dated July 1, 2016. Apprentices or trainees shall be permitted to work as such subject to Administrative Regulations adopted by the Commissioner of Workplace Standards. Copies of these regulations will be furnished upon request from any interested person.

Before using apprentices on the job the contractor shall present to the Contracting Officer written evidence of registration of such employees in a program of a State apprenticeship and training agency approved and recognized by the U. S. Bureau of Apprenticeship and Training. In the absence of such a State agency, the contractor shall submit evidence of approval and registration by the U. S. Bureau of Apprenticeship and Training.

The contract or shall submit to the Contracting Officer, written evidence of the established apprenticeship-journeyman ratios and wage rates in the project area, which will be the basis for establishing such ratios and rates for the project under the applicable contract provisions.

TO: EMPLOYERS/EMPLOYEES

PREVAILING WAGE SCHEDULE:

The wages indicated on this wage schedule are the least permitted to be paid for the occupations indicated. When an employee works in more than one classification, the employer must record the numbers of hours worked in each classification at the prescribed hourly base rate.

OVERTIME:

Overtime is to be paid after an employee works eight (8) hours a day or forty (40) hours a week, whichever gives the employee the greater wage. At least time and one-half the base rate is required for all overtime. A laborer, workman or mechanic and an employer may enter into a written agreement or a collective bargaining agreement to work more than eight (8) hours a calendar day but not more than ten (10) hours a calendar day for the straight time hourly rate. Wage violations or questions should be directed to the designated Engineer or to the undersigned.

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NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY (Executive Order 11246)

- 1. The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Specifications" set forth herein.
- 2. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate work force in each trade on all construction work in the covered area, are as follows:

GOALS FOR MINORITY	GOALS FOR FEMALE
PARTICIPATION	PARTICIPATION IN
IN EACH TRADE	EACH TRADE
7.0%	6.9%

These goals are applicable to all the Contractor's construction work (whether or not it is Federal or federally-assisted) performed in the covered area. If the contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the contractor also is subject to the goals for both its federally involved and non-federally involved construction.

The Contractor's compliance with the Executive Order and the regulations in CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4, 3(a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within ten (10) working days of award of any construction subcontract in excess of \$10,000.00 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the subcontractor; employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed. The notification shall be mailed to:

Evelyn Teague, Regional Director Office of Federal Contract Compliance Programs 61 Forsyth Street, SW, Suite 7B75 Atlanta, Georgia 30303-8609

4. As used in this Notice, and in the contract resulting from this solicitation, the "covered area" is Rockcastle County.

PART IV

INSURANCE

INSURANCE

The Contractor shall procure and maintain the following insurance in addition to the insurance required by law:

- 1) Commercial General Liability-Occurrence form not less than \$2,000,000 General aggregate, \$2,000,000 Products & Completed Aggregate, \$1,000,000 Personal & Advertising, \$1,000,000 each occurrence.
- 2) Automobile Liability- \$1,000,000 per accident
- 3) Employers Liability:
 - a) \$100,000 Each Accident Bodily Injury
 - b) \$500,000 Policy limit Bodily Injury by Disease
 - c) \$100,000 Each Employee Bodily Injury by Disease
- 4) The insurance required above must be evidenced by a Certificate of Insurance and this Certificate of Insurance must contain one of the following statements:
 - a) "policy contains no deductible clauses."
 - b) "policy contains _____ (amount) deductible property damage clause but company will pay claim and collect the deductible from the insured."
- 5) KENTUCKY WORKMEN'S COMPENSATION INSURANCE. The contractor shall furnish evidence of coverage of all his employees or give evidence of self-insurance by submitting a copy of a certificate issued by the Workmen's Compensation Board.

The cost of insurance is incidental to all contract items. All subcontractors must meet the same minimum insurance requirements.

PART V

BID ITEMS

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PROPOSAL BID ITEMS

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Section: 0001 - PAVING

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0010	00001		DGA BASE	84,149.00	TON		\$	
0020	00018		DRAINAGE BLANKET-TYPE II-ASPH	87,907.00	TON		\$	
0030	00100		ASPHALT SEAL AGGREGATE	414.00	TON		\$	
0040	00103		ASPHALT SEAL COAT	50.00	TON		\$	
0050	00194		LEVELING & WEDGING PG76-22	4,395.00	TON		\$	
0060	00214		CL3 ASPH BASE 1.00D PG64-22	4,395.00	TON		\$	
0070	00217		CL4 ASPH BASE 1.00D PG64-22	78,034.00	TON		\$	
0800	00219		CL4 ASPH BASE 1.00D PG76-22	26,754.00	TON		\$	
0090	00339		CL3 ASPH SURF 0.38D PG64-22	4,172.00	TON		\$	
0100	00342		CL4 ASPH SURF 0.38A PG76-22	19,778.00	TON		\$	
0110	02676		MOBILIZATION FOR MILL & TEXT	1.00	LS		\$	
0120	02677		ASPHALT PAVE MILLING & TEXTURING	600.00	TON		\$	
0130	20071EC		JOINT ADHESIVE	186,384.00	LF		\$	

Section: 0002 - ROADWAY

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0140	00078		CRUSHED AGGREGATE SIZE NO 2	2,119.00	TON		\$	
0150	01005		PERFORATED PIPE EDGE DRAIN-4 IN	46,537.00	LF		\$	
0160	01006		PERFORATED PIPE EDGE DRAIN-6 IN	23,148.00	LF		\$	
0170	01010		NON-PERFORATED PIPE-4 IN	1,874.00	LF		\$	
0180	01015		INSPECT & CERTIFY EDGE DRAIN SYSTEM	1.00	LS		\$	
0190	01020		PERF PIPE HEADWALL TY 1-4 IN	47.00	EACH		\$	
0200	01021		PERF PIPE HEADWALL TY 1-6 IN	1.00	EACH		\$	
0210	01028		PERF PIPE HEADWALL TY 3-4 IN	31.00	EACH		\$	
0220	01032		PERF PIPE HEADWALL TY 4-4 IN	40.00	EACH		\$	
0230	01741		CORED HOLE DRAINAGE BOX CON-6 IN	107.00	EACH		\$	
0240	01845		ISLAND INTEGRAL CURB	333.00	LF		\$	
			DELINEATOR FOR GUARDRAIL MONO					
0250	01982		DIRECTIONAL WHITE	223.00	EACH		\$	
0260	01985		DELINEATOR FOR BARRIER - YELLOW	612.00	EACH		\$	
0270	01987		DELINEATOR FOR GUARDRAIL BI DIRECTIONAL WHITE	63.00	EACH		\$	
0280	01990		DELINEATOR FOR BARRIER WALL-B/W	12.00	EACH		\$	
0290	02003		RELOCATE TEMP CONC BARRIER	57,800.00	LF		\$	
0300	02014		BARRICADE-TYPE III	16.00	EACH		\$	
0310	02157		PAVED DITCH TYPE 1	17.25	SQYD		\$	
0320	02200		ROADWAY EXCAVATION	449,598.00	CUYD		\$	
0330	02262		FENCE-WOVEN WIRE TYPE 1	3,225.00	LF		\$	
0340	02265		REMOVE FENCE	3,118.00	LF		\$	
0350	02268		REMOVE & REPLACE FENCE	46,646.00	LF		\$	
0360	02360		GUARDRAIL TERMINAL SECTION NO 1	5.00	EACH		\$	
0370	02363		GUARDRAIL CONNECTOR TO BRIDGE END TY A	8.00	EACH		\$	
0380	02367		GUARDRAIL END TREATMENT TYPE 1	14.00	EACH		\$	
0390	02369		GUARDRAIL END TREATMENT TYPE 2A	14.00	EACH		\$	
0400	02371		GUARDRAIL END TREATMENT TYPE 7		EACH		\$	

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LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0410	02381		REMOVE GUARDRAIL	27,785.00	LF		\$	
0420	02429		RIGHT-OF-WAY MONUMENT TYPE 1	118.00	EACH		\$	
0430	02432		WITNESS POST	22.00	EACH		\$	
0440	02488		CHANNEL LINING CLASS IV	702.30	CUYD		\$	
			CLEARING AND GRUBBING					
0450	02545		(APPROXIMATELY 35.37 ACRES)	1.00	LS		\$	
0460	02562		TEMPORARY SIGNS	999.00	SQFT		\$	
0470	02585		EDGE KEY	336.00	LF		\$	
0480	02598		FABRIC-GEOTEXTILE TYPE III	1,350.00	SQYD		\$	
0490	02599		FABRIC-GEOTEXTILE TYPE IV	6,000.00	SQYD		\$	
0500	02600		FABRIC GEOTEXTILE TY IV FOR PIPE	14,855.00	SQYD	\$2.00	\$	\$29,710.00
0510	02650		MAINTAIN & CONTROL TRAFFIC	1.00	LS		\$	
0520	02671		PORTABLE CHANGEABLE MESSAGE SIGN	4.00	EACH		\$	
0530	02690		SAFELOADING	14.00	CUYD		\$	
0540	02696		SHOULDER RUMBLE STRIPS-SAWED	93,193.00	LF		\$	
0550	02726		STAKING	1.00	LS		\$	
			REMOVE STRUCTURE				_	
0560	02731		(KY 1505)	1.00	LS		\$	
0570	02731		REMOVE STRUCTURE (KY 3275)	1.00	LS		¢	
0570	02898		RELOCATE CRASH CUSHION		EACH		\$ \$	
0590	02090		CONCRETE BARRIER WALL TYPE 9T	52,108.00	LF		φ \$	
0600	03171		TUBULAR MARKERS	•	EACH			
							\$	
0610	04904		BARRIER MOUNTING BRACKET		EACH		\$	
0620	05950		EROSION CONTROL BLANKET	1,200.00			\$	
0630	05963		INITIAL FERTILIZER	1.77	TON		\$	
0640	05964		20-10-10 FERTILIZER	11.00	TON		\$	
0650	05985		SEEDING AND PROTECTION	206,184.00			\$	
0660	05992		AGRICULTURAL LIMESTONE	106.00	TON		\$	
0670	06401		FLEXIBLE DELINEATOR POST-M/W	175.00			\$	
0680	06405		SBM ALUMINUM PANEL SIGNS	624.00			\$	
0690	06411		STEEL POST TYPE 2	296.00	LF		\$	
0700	06412		STEEL POST MILE MARKERS		EACH		\$	
0710	06510		PAVE STRIPING TEMP PAINT 4 IN	2,400.00	LF		\$	
0720	06511		PAVE STRIPING-TEMP PAINT-6 IN	280,908.00	LF		\$	
0730	06514		PAVE STRIPING-PERM PAINT-4 IN	5,400.00	LF		\$	
0740	06542		PAVE STRIPING-THERMO-6 IN W	74,325.00	LF		\$	
0750	06543		PAVE STRIPING-THERMO-6 IN Y	49,700.00	LF		\$	
0760	08904		CRASH CUSHION TY VI CLASS C		EACH	64.00	\$	£400.004.00
0770	10020NS		FUEL ADJUSTMENT	492,661.00		\$1.00		\$492,661.00
0780	10030NS		ASPHALT ADJUSTMENT	649,856.00		\$1.00		\$649,856.00
0790	20432ES112		REMOVE CRASH CUSHION		EACH		\$	
0800	20911ED		HIGH SLUMP 3000 PSI GROUT		CUYD		\$	
0810	20912ND		BARRIER WALL POST		EACH		\$	
0820	21430ES508		CONC MEDIAN BARRIER TYPE 12C(50)	20,831.00	LF		\$	
0830	21802EN		G/R STEEL W BEAM-S FACE (7 FT POST)	23,087.50	LF		\$	
0840	23139EN		STRIPING REMOVAL	116,490.00	LF		\$	
0850	23143ED		KPDES PERMIT AND TEMP EROSION CONTROL	1.00	LS		\$	
0860	23607EC		PAVE MARK THERMO-LANE REDUCTION ARROW	6.00	EACH		\$	

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LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0870	24255EC		REMOVE CABLE GUARDRAIL BARRIER SYSTEM	29,564.00	LF		\$	
0880	24470ED		PERMEABLE PAVEMENT DRAIN	51.00	SQYD		\$	
0890	24489EC		INLAID PAVEMENT MARKER	2,464.00	EACH		\$	
0900	24779EC		INTELLIGENT COMPACTION FOR SOIL	66,866.00	CUYD		\$	
0910	24780EC		INTELLIGENT COMPACTION FOR AGGREGATE	84,149.00	TON		\$	
0920	24781EC		INTELLIGENT COMPACTION FOR ASPHALT	225,396.00	TON		\$	
0930	24814EC		PIPELINE INSPECTION	7,950.00	LF		\$	
0940	24852EC		BARRIER WALL GATE	2.00	EACH		\$	
0950	24873EC		CONTROL SYSTEM FOR INCIDENT MANAGEMENT	1.00	LS		\$	
0960	24885ED		RADAR SPEED SIGN	2.00	EACH		\$	

Section: 0003 - DRAINAGE

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0970	00461		CULVERT PIPE-15 IN	298.00	LF		\$	
0980	00462		CULVERT PIPE-18 IN	494.00	LF		\$	
0990	00464		CULVERT PIPE-24 IN	43.00	LF		\$	
1000	00466		CULVERT PIPE-30 IN	52.00	LF		\$	
1010	00473		CULVERT PIPE-66 IN	28.00	LF		\$	
1020	00521		STORM SEWER PIPE-15 IN	14,835.00	LF		\$	
1030	00521		STORM SEWER PIPE-15 IN (CMP, NO ALTERNATE)	415.00	LF		\$	
1040	00522		STORM SEWER PIPE-18 IN	852.00	LF		\$	
1050	01202		PIPE CULVERT HEADWALL-15 IN	5.00	EACH		\$	
1060	01204		PIPE CULVERT HEADWALL-18 IN	3.00	EACH		\$	
1070	01222		PIPE CULVERT HEADWALL-66 IN	1.00	EACH		\$	
1080	01432		SLOPED BOX OUTLET TYPE 1-15 IN	5.00	EACH		\$	
1090	01450		S & F BOX INLET-OUTLET-18 IN	2.00	EACH		\$	
1100	01451		S & F BOX INLET-OUTLET-24 IN	1.00	EACH		\$	
1110	01452		S & F BOX INLET-OUTLET-30 IN	2.00	EACH		\$	
1120	01480		CURB BOX INLET TYPE B	8.00	EACH		\$	
1130	01490		DROP BOX INLET TYPE 1	6.00	EACH		\$	
1140	01559		DROP BOX INLET TYPE 13G	4.00	EACH		\$	
1150	01641		JUNCTION BOX-15 IN	2.00	EACH		\$	
1160	01643		JUNCTION BOX-24 IN	1.00	EACH		\$	
1170	01644		JUNCTION BOX-30 IN	1.00	EACH		\$	
1180	02484		CHANNEL LINING CLASS III	73.00	TON		\$	
1190	02488		CHANNEL LINING CLASS IV	90.40	CUYD		\$	
1200	21601NN		CONC MED BAR BOX INLET TY 12A2-50	2.00	EACH		\$	
1210	21602NN		CONC MED BARR BOX INLET TY 12B2-50	46.00	EACH		\$	
1220	22620NN		CONC MED BARR BOX INLET TY 12A1-50	1.00	EACH		\$	
1230	23043NS710		CONC MED BARRIER INLET TY 14B2-50	4.00	EACH		\$	
1240	23611NN		CONC MED BAR BOX INLET TY 12B1-50	53.00	EACH		\$	

Section: 0004 - BRIDGE - HURRICANE SCHOOL ROAD - DWG. 25340

1390 21532ED

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\$

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LINE	BID CODE	ALT DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
1250	02231	STRUCTURE GRANULAR BACKFILL	62.00	CUYD		\$	
1260	02998	MASONRY COATING	1,417.00	SQYD		\$	
1270	03299	ARMORED EDGE FOR CONCRETE	56.80	LF		\$	
1280	08001	STRUCTURE EXCAVATION-COMMON	436.00	CUYD		\$	
1290	08002	STRUCTURE EXCAV-SOLID ROCK	18.00	CUYD		\$	
1300	08020	CRUSHED AGGREGATE SLOPE PROT	182.00	TON		\$	
1310	08033	TEST PILES	95.00	LF		\$	
1320	08046	PILES-STEEL HP12X53	274.30	LF		\$	
1330	08094	PILE POINTS-12 IN	16.00	EACH		\$	
1340	08100	CONCRETE-CLASS A	159.30	CUYD		\$	
1350	08104	CONCRETE-CLASS AA	300.20	CUYD		\$	
1360	08150	STEEL REINFORCEMENT	24,381.00	LB		\$	
1370	08151	STEEL REINFORCEMENT-EPOXY COATED	84,580.00	LB		\$	
1380	08634	PRECAST PC I BEAM TYPE 4 (54-IN)	1,112.00	LF		\$	

564.10

LF

Section: 0005 - BRIDGE - KY 1505 OVER I-75 - DWG. 25341

RAIL SYSTEM TYPE III

LINE	BID CODE	ALT DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
1400	02231	STRUCTURE GRANULAR BACKFILL	32.00	CUYD		\$	
1410	02998	MASONRY COATING	1,210.00	SQYD		\$	
1420	03299	ARMORED EDGE FOR CONCRETE	56.00	LF		\$	
1430	08001	STRUCTURE EXCAVATION-COMMON	193.00	CUYD		\$	
1440	08020	CRUSHED AGGREGATE SLOPE PROT	172.00	TON		\$	
1450	08033	TEST PILES	204.00	LF		\$	
1460	08046	PILES-STEEL HP12X53	618.40	LF		\$	
1470	08094	PILE POINTS-12 IN	48.00	EACH		\$	
1480	08100	CONCRETE-CLASS A	170.10	CUYD		\$	
1490	08104	CONCRETE-CLASS AA	262.30	CUYD		\$	
1500	08150	STEEL REINFORCEMENT	19,900.00	LB		\$	
1510	08151	STEEL REINFORCEMENT-EPOXY COATED	65,111.00	LB		\$	
1520	08500	APPROACH SLAB	155.60	SQYD		\$	
1530	08633	PRECAST PC I BEAM TYPE 3 (45-IN)	984.00	LF		\$	
1540	21532ED	RAIL SYSTEM TYPE III	500.00	LF		\$	

Section: 0006 - BRIDGE - CULVERT - RCBC 6' X 5' - DWG. 25430

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC F	P AMOUNT
1550	02403		REMOVE CONCRETE MASONRY	12.00	CUYD	\$	
1560	08003		FOUNDATION PREPARATION	1.00	LS	\$	
1570	08100		CONCRETE-CLASS A	49.80	CUYD	\$	
1580	08150		STEEL REINFORCEMENT	15,502.00	LB	\$	

Section: 0007 - TRAINEES

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LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
1590	02742		TRAINEE PAYMENT REIMBURSEMENT 1 CEMENT MASON	1,200.00	HOUR		\$	
1600	02742		TRAINEE PAYMENT REIMBURSEMENT 1 GROUP 2, 3 OR 4 OPERATOR	1,400.00	HOUR		\$	
1610	02742		TRAINEE PAYMENT REIMBURSEMENT 1 GROUP 2, 3 OR 4 OPERATOR	1,400.00	HOUR		\$	

Section: 0008 - DEMOBILIZATION &/OR MOBILIZATION

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
1620	02568		MOBILIZATION	1.00	LS		\$	
1630	02569		DEMOBILIZATION	1.00	LS		\$	